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Initial Drug Court Risk Assessment Scores and Probationers' Completion of Drug Court Programs

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MPA, Walden University, 2009

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Abstract

Drug offenders continue to cost citizens and governments money, while drug courts attempt to rehabilitate offenders and reduce recidivism. The Level of Service Inventory-Revised (LSI-R) is a risk assessment tool used by courts and probation offices to determine needs and risks of offenders, and often determine levels of supervision. The purpose of this quasi experimental study was to determine if there is a statistically significant association between the initial LSI-R scores of offenders entering drug courts and their successful completion of the drug court program. Therapeutic jurisprudence theory, the theoretical framework for this study, suggests that the courts and the law are therapeutic to people and that drug treatment will promote positive behavior changes for the offenders. Data for this study were acquired from a database provided by a Kansas drug court, including initial LSI-R scores, completion records, and demographics of 210 drug court participants. A one-way ANOVA was used to test the hypotheses. Significant statistical results were found, indicating that drug court success was positively associated with the LSI-R score. The study may lead to social change by providing information about participants, most likely to benefit from drug court programs, which will save governments money and make room in the programs for more successful candidates, thus producing more productive citizens in the community.

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Dedication

This study is dedicated to governments, drug courts, probation officers, and offenders.

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I want to thank my chair Dr. Mary Brown and my committee member Dr. David Milen for continuing to push me to the end and for all the advice, encouragement, and tough love. I would also like to thank my family and friends, especially my daughter Tierra, for believing in me and for accepting the sacrifices that had to be made during this journey.

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Chapter 1: Introduction to the study

Introduction

This study focused on the Level of Service Inventory-Revised (LSI-R) assessment tool utilized by probation officers to determine offenders' risk of offending and their treatment needs. The study sought to determine if there is a positive correlation between the LSI-R score and the outcome of the probationer completing the drug court program successfully or unsuccessfully. Specifically, this means if the score attained on the LSI-R was of a certain number or lower (which the number was determined by the study), then it was more likely that the probationer would be successful at completing a drug court program. Conversely, if the score of the LSI-R was of a certain number or higher (which the number was determined by the study), then it was likely that the probationer would not be successful at completing a drug court program. Finally, it could have been determined that there was no correlation between the LSI-R score and the probationer's likelihood of completing the drug court program successfully or unsuccessfully. But, if there was a correlation between the two, it would mean that the probation officer could look at the LSI-R score and predict the probationer's success in a drug court program.

Drug courts are an attempt to decrease the costs of the penalties imposed on nonviolent drug offenders, while also providing treatment to the offender in hopes of reducing the recidivism rate and saving governments money. Burose and Mumola (2002) described nonviolent offenders as offenders who commit crimes that involve property, drugs, and public order offenses in which there is no threat, harm, or attack on a human victim. In 1989, the first drug treatment court in the United States was established in Miami-Dade County, Florida, by Judge Herbert Klein, Dade County Attorney Janet Reno, and other officials (Burke, 2010).

According to Guastaferro (2011), there are more than 2,000 drug courts operating in the United States with thousands of offender participants. Drug court participants are people who have been placed on intensive supervision probation. In drug court, an assessment tool is utilized to determine level of supervision and needs of the probationer. Taxman, Cropsey, Young, and Wexler (2007) explained that it is recommended to use screening and assessment tools to analyze the risk for recidivism and substance disorders among offenders. For example, the Level of Service Inventory-Revised (LSI-R) is a risk and needs assessment instrument that is widely used internationally in criminal justice systems. This tool was developed in 1995 by Don Andrews and James Bonta of Ottawa, Canada (Simourd, 2011). There are 54 items within 10 domains. The items are scored on the completed instrument, and a total score can range from 0-54 (Simourd, 2011). The higher the total scores of the LSI-R, the higher the risk of re-offending (Simourd, 2011). The LSI-R is administered by the probation officer verbally to the offender, who self reports. An initial LSI-R is conducted, then again after 6 months in the program, and again at 12 months, and then finally again at discharge of the program. I conducted this study to see if there is a positive correlation between the LSI-R score and if the drug court participant completes the drug court program successfully.

The study was needed so that the government, including at the city, county, state, and federal levels, which have drug courts in place or are building future drug courts, can utilize the information to determine the most appropriate plan of action for participants in drug court. Also, the government could save money by eliminating potential candidates that are likely to not do well in a drug court program, before they even enter the program. This savings can be achieved by identifying the most appropriate participants for the drug court program. Chapter 1 introduces

the research study by providing a background on the literature from researchers such as Taxman et al. (2007), who discussed using assessment tools to analyze offenders' risk of recidivism. Lowencamp, Holsinger, Brunsman-Lovins, and Latessa (2004) discussed their research on the reliability of the LSI-R. Guastaferro (2011) discussed the LSI-R's effectiveness of analyzing an offender's criminogenic needs while in drug court. A gap in knowledge is identified with the literature discussed in this study. The research problem is stated along with research questions and the purpose of the study. The theory is identified and the theoretical foundation is detailed. The research design is briefly described by identifying the variables and methodology. I clarify assumptions, limitations, and delimitations.

Background

The United States Sentencing Commission (USSC) was created by the Sentencing Reform Act of 1984 (SRA of 1984), and together they created federal sentencing guidelines and implemented mandatory minimums (Hartley, 2008). The mandatory minimums were attached to drug offense sentences because the courts feared that young people had easy access to narcotics (Harley, 2008). The courts thought that the harsh sentencing for drug offenders would result in drug kingpins being incarcerated and reduce crimes and drugs; however, according to Harley (2008), that was not the end result and low level offenders were affected.

Even before the SRA of 1984, state governments were implementing mandatory minimums for drug offenders. New York State adopted the Rockefeller drug laws in 1973, which included a minimum 15 years to life in prison for the possession of 4 ounces or for selling 2 ounces of heroine, morphine, cocaine, or cannabis (Sirin, 2011). Additionally, Sirin (2011) noted that a criminal who committed second-degree murder would get about the same sentence. In

Michigan, the 650-Lifer law was adopted in 1978, which stipulated that for the sale, manufacture, or possession of 650 grams of cocaine or heroin (approximately 1.45 pounds), a criminal was sentenced to life in prison, without the possibility of parole (Sirin, 2011). These are two examples of how governments went to an extreme to mandate sentences for drug crimes as part of the "War on Drugs."

These laws have contributed to the jails and prisons becoming overcrowded with people who have been convicted of drug crimes (Sirin, 2011). The Rockefeller laws in New York caused the New York prisons to explode to nearly 60,000 more prisoners between the years of 1973 to 1999 (Dunne, 1999). The New York prison population was reported to have lowered their population numbers by the year 2003 to 66,300 (Anonymous, May 2003); by 2004 the state had reformed their policies; and, eventually, in 2009 the Rockefeller laws were invalidated (Sirin, 2011).

Similarly, Michigan made reforms in 1998, but enacted strict laws that were intended for the dealers who were doing big business but that ended up affecting the users and small time dealers (Anonymous Jan, 2003). By 2003, there were 49,000 people in prison in the state of Michigan and two-thirds of them were for drug offenses (Anonymous, 2003). Also in 2003, Michigan reformed the statute, removing most of the drug crimes' mandatory minimum sentences (Sirin, 2011).

In addition to governments and courts, leaders, elected officials, and Presidents have made efforts to fight the drug war with policies, programs, and organizations. Sirin (2011) explained that in 1971, President Richard Nixon declared "war on drugs," which was to be an international effort to decrease the selling and usage of drugs. Since the 1980s, governments

have enhanced punishments for those with drug offenses in order to fight the "war on drugs," which has increased the money spent in our criminal justice systems, jails, and prisons (Burnes & Peyrot, 2003). As of 2010, $1 trillion had been spent in the United States towards reducing drugs and crimes related to drugs since the "war on drugs" began (Mendoza, 2010).

President Nixon also created the Drug Enforcement Administration (DEA) in 1973 to work with all agencies on drug crimes (National Public Radio [NPR], 2007). Then, in the 1980s, the drug campaigns engaged people in the community. The "Just Say 'No' to Drugs" campaign was developed by First Lady Nancy Reagan in 1984 to teach youth to not use drugs. From Nancy Reagan's work, the Drug Abuse Resistance and Education (DARE) program was developed (Riskind, 2002). DARE continues to be taught in some schools, teaching the dangers of using drugs. Local, state, and federal taxpayers along with private contributors fund DARE, which is a nonprofit organization and therefore can raise money as well (Riskind, 2002). In 2000, DARE made nearly $2.9 million from selling t-shirts and other goods (Riskind, 2002). The money is applied toward teaching materials, the salary of 30,000 police officers who teach the program, and memorabilia (Riskind, 2002). The program is not required in all schools, and the government officials have the choice to implement the program. Once they do, they have to have training for how to teach the program (Riskind, 2002).

More policies and programs developed by Presidents to end drugs include the Anti-Drug Abuse Act of 1986, which was signed by President Reagan and allowed $1.7 billion to be used in the drug war (NPR, 2007). Minimum sentencing guidelines for drug crimes were also brought about with this bill (NPR, 2007). The Office of National Drug Control Policy was created by President George Bush Sr. in 1989. This office heads many programs, including the High

Intensity Drug Trafficking Program, National Youth Anti-Drug Media Campaign, Drug Free Communities Program, Anti-Doping Activities, and World Anti-Doping Agency (WADA). Freking (2006) noted that the Office of National Drug Control Policy found that the amount of people using drugs slightly increased in 2005 when they conducted a survey, which was estimated at 19.7 million people nationwide. President Clinton contributed with developing Plan Colombia in the year 2000, which gave Colombia $1.3 billion to use towards the counter-narcotics program (Grossman, 2005). President Obama signed the Fair Sentencing Act in 2010, which eliminated the mandatory minimum sentences for simple possession of cocaine (Lee, 2010). Also, the act increased the fines to pay for major drug traffickers (Lee, 2010). The budget that Obama proposed for the 2013 fiscal year included $25.6 billion, which is $415.3 million more than for the 2012 fiscal year (Office of National Drug Control Policy, 2012). Obama supported drug courts and other innovative new programs for alternatives to incarceration (Lemaitre, 2011).

Problem Statement

Drug-addicted offenders continue to cost criminal justice systems, jails, and prisons money, while drug courts attempt to offer rehabilitation in order to assist with reducing recidivism among drug addicted offenders. Little information is known regarding a person's personality and style that best benefits from the drug court programs and regarding those who are more likely to complete the program successfully. Consequently, there are participants in the program that are not successfully completing the program and, thus, are costing taxpayers money. Potential non-successful participants could be eliminated from entering the program and costing the program money if there was a better understanding of what type of participant would

be more likely to successfully complete the program. Specifically, to address this problem, the LSI-R could be conducted to screen potential drug offenders in order to determine if they are most appropriate for the drug court program. This study investigated LSI-R scores in regards to participant drug court success. The dependent variable was the drug court participant's success at completing the program, and the independent variable was the LSI-R.

The study asked the following research question and had the following hypothesis and null hypothesis:

Research Question One: To what extent does the initial LSI-R score predict drug court participants' success in the program?

Hypothesis One: There is a significant difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R score than the group of participants who scored 33 or less on their initial LSI-R.

Null Hypothesis One: There is no relationship between the LSI-R score and the drug court participants' success in the program.

The study also looked closely at variables, such as gender, race, employment, education, etc. There is detailed discussion regarding the research questions, research hypotheses, and research objectives in Chapter 3.

Purpose and Significance of the Study

Previous literature discusses how the Level of Services Inventory-Revised (LSI-R), which is an assessment tool utilized by probation officers to assess probationers' risk of offending and their treatment needs, can predict recidivism among offenders. This study specifically examined the correlation between the LSI-R scores and the success of completing

the drug court program, in order to identify who are the most appropriate drug court participants. The study will be useful for policy makers and government officials who have not developed a drug court system in their area. It will also be beneficial to those who have developed a drug court program but have not had the most successful results with their program and recidivism. Finally, researchers can benefit from the findings of this study, for it can help enhance future studies and research.

In planning the study, it was reasoned that if the study results supported a positive correlation between the LSI-R scores and successful completion of the drug court program, policy makers and drug court administrators would be able to take the information and utilize it in order to know by the LSI-R score if the participant was likely to successfully complete drug court. They could determine who would be the most appropriate candidates for likely success in their program, which would potentially eliminate entering participants who would most likely not to complete the program successfully and save the drug courts money. If it were found that there was not a positive correlation between the LSI-R and the successful completion of the drug court program, policy makers and drug court administrators would know that they could not rely on the LSI-R scores to determine the most appropriate candidates for the drug court program. The study contributed to positive social change by potentially improving the government organization of drug courts, which, in the end, may contribute to the community. The study used a quantitative methodology that analyzed the correlation between the LSI-R scores and the successful or unsuccessful completion of a drug court program. The dependent variable was the drug court participant's success at completing the program, and the independent variable was the LSI-R score.

Theoretical Framework

According to Schma (2000), therapeutic jurisprudence "concentrates attention on the psychological and emotional impact of law, legal procedures, and legal actors." The theory is that drug courts have a psychological and emotional impact on the participants and outcome. The therapeutic jurisprudence theory was founded by Professor David Wexler and Professor Bruce Winick (Birgden, 2004). Both Wexler and Winick suggested that courts can be therapeutic to people (Schma, 2000), and Wexler (2000) added that therapeutic jurisprudence studies the "role of the law as a therapeutic agent." Birgden (2004) described therapeutic jurisprudence as utilizing "psychological knowledge to determine ways in which the law can enhance individual well-being," and combines law, psychology, psychiatry, criminology, criminal justice, public health, and philosophy in an interdisciplinary enterprise.

Birgden (2004) relayed assumptions that are related to the court system and therapeutic jurisprudence. The way the law is carried out can affect the offender's well-being, and the law has social science knowledge that should be able to determine the most effective ways to enhance offeder well-being (Birgden, 2004). According to Birgden (2004), when an offender is brought before the law, the law should take advantage and utilize that moment to initiate a pro-social life style. Birgden (2004) also suggested a required correctional setting to boost the therapeutic effects of the law. Therapeutic jurisprudence applied to this study by examining the relationship between court action (independent variable) and success at completing the drug court program (dependent variable). Chapter 2 will provide more detailed explanation of therapeutic jurisprudence.

Nature of Study

This was a quantitative method study utilizing a one-way ANOVA. There was no intervention during the study. The dependent variable in this study was the success of completing the drug court program, and the independent variable was the LSI-R score. The population of the study was all the drug court participants in Sedgwick County. This researcher collected a sample from the subset Sedgwick County Drug Court. Sedgwick County is located in Wichita, Kansas. Secondary data was utilized in this study and analyzed through SPSS.

Operational Definitions

LSI-R score was an independent variable. LSI-R stands for Level of Service Inventory-Revised, and it is a risk assessment test that measures the risk rate of the participant for reoffending. The probation officer verbally asks the questions to offenders and they verbally answer the questions. The probation officer writes the answers down on paper and then transfers the information onto the computer later. To answer some questions, for example the offender's criminal history, the probation officer looks up the information.

Influence is defined as the following: If the probation officer can look at the LSI-R score and statistically predict that the probationer is more likely or less likely to be successful at completing the drug court program. Influence refers to whether the LSI-R score is a possible predictor of a probationer successfully completing drug court.

Sanction is punishment given to offenders on probation when they violate their terms of probation. It could include fines, community service, and even jail time.

Success is defined for this purpose as fully completing the drug court program and the provider discharging the offender successfully.

Recidivism refers to the act of repeating a crime even after one has been punished for the same crime. In the context of this study, recidivism is defined as the offender repeating a drug offense even after he or she has been punished for the crime.

Assumptions, Limitations, Scope, and Delimitations

An assumption of this study was that the participants answered the questions honestly during the LSI-R, which was the tool used to measure their risk of reoffending. In administering the LSI-R, the probation officer asks the questions verbally, the offender responds to the questions verbally, and then the probation officer writes the answers down and transfers the information into a computer. Also, it was assumed that the probation officers inputted the information into the computer correctly and scored the LSI-R correctly according to the participants' answers.

This study was delimited to participants who entered a drug court program in Kansas in September 2011 or before. A delimitation of this study was that the sample was participants in this drug court only. The drug courts in other governments may be different in many ways as to their rules and regulations, policies, and criteria. Geography was a limitation to the study, because participants may have experienced different factors in this geographic area than in other areas of the country, such as unemployment rate, etc. External validity of this study included honesty of the drug court participants and no biased participation of the probation officers. Bonta (2002) showed that many researchers found that the LSI-R's predictive validity is well established and there is evidence of this (Andrews & Robinson, 1984; Motiuk, Bonta, & Andrews, 1990; Raynor, Kynch, Roberts & Merrington, 2000). Brennan, Dietrevich, and Ehret (2009) added that in their study there was evidence in predictive validity rates of no differences

between ethnic backgrounds. Vose, Lowenkamp, Smith and Cullen (2009) suggested that there is no difference in the predictive validity between genders. Other studies have found somewhat different results. Fass, Heilbrun, DeMatteo, and Fretz (2008) found in their study inconsistency between programs with predicting results, which they blamed on sites not collecting the data consistently. Whiteacre (2006) found there were more classification errors for African American offenders than Caucasians or Hispanics in a different study. A classification error occurs when the offender is classified as a higher risk than what he or she actually is or proves to be.

Summary

This chapter provided a preview of current literature that is available about drug courts and LSI-R's. Chapter 2 goes into more detail with the literature available and the studies already conducted, which will prove a gap of information. There is literature containing information on drug courts and on LSI-R's but not on both together. This study researched if once the initial LSI-R is completed, the drug court officers can utilize the LSI-R score to determine or predict whether the probationer will be successful at completing the drug court program or not. This information may help to determine the most appropriate participants for drug court programs. If the score predicts that the offender would most likely not be a successful candidate, then the offender could potentially receive a different sentence that would be more suitable, such as jail or prison time.

Chapter 3 discusses the study's research design and rationale, as well as the methodology, including population, sampling, instrumentation, validity, and ethical procedures. Data collection is described in Chapter 4, along with the results and statistical analysis. The study's findings are interpreted in Chapter 5. The limitations of the study and implications, along

with recommendations for future research, are also discussed in Chapter 5, with a conclusion to the study, implications for future study, and a discussion of social change.

Chapter 2: Literature Review

Introduction

This chapter outlines the previous studies and research that focused on the Level of Services Inventory-Revised (LSI-R) assessment tool used by probation officers in determining the risk of offenders and their treatment needs. Studies such as Birgden (2004) and Andrews and Bonta (2006) conducted in the probation and criminology realm outline relevant information, such as the relationship between criminals, drug usage, and recidivism. Government and nongovernmental organizations are in the front line to ensure that citizens are educated on the dangers of being involved with drugs.

If the drug court participants were profiled before entering the program, perhaps potential non-successful participants could be eliminated from entering the program, which would lead to saving time and money to the taxpayer. The rationale of examining the LSI-R in relation to drug court success is to screen potential drug addicted offenders in order to evaluate whether they are most appropriate for drug court programs. The most important aspect is to ensure that huge sums of the tax payers' money are not used without producing positive outcomes for the overall society.

Literature Search Strategy

Some of the criminology databases used in this study includes SCOPUS, SAGE research methods online, Criminology POWERSEARCH, and National Criminal Justice Reference Service (NCJRS) Abstracts Database. Health databases were used, including CINAHL, MEDLINE, and COCHRAINE among others. Key words used in the search include drug court and LSI-R.

The concept of drug courts was introduced in 1982 in Miami-Dade County, Fl, by Judge Herbert Klein, Dade County Attorney Janet Reno, and other officials (Burke, 2010). The information gathered is between the years of 2000 and 2013. Most of the sources in this study were published after 2000 in order to incorporate all the changes that would have occurred within the last twelve years.

Link between Drug Use and Criminal Behaviors

In the United States, a number of policies and programs have been developed by the government aimed at reducing drug consumption. For instance, the Anti-Drug Abuse Act of 1986 was signed by President Reagan and allowed $1.7 billion to be diverted into the drug war (NPR, 2007). This bill mandated a minimum sentencing of five years incarcerated for possessing five grams of crack cocaine.

According to Burke (2010), the number of drug related crime arrests increased from 322,000 in 1970 to more than 1.3 million in 1998, which is 12 years after the Anti-Drug Abuse Act of 1986 and the numbers continued to increase. Burke (2010) added that the United States has the highest incarceration rate in the world, and the high recidivism rates are partly to blame. Citizens (2008) stated that the number of prison commitments that were from drug related crimes increased 482 percent from 1985-1989, which is only 4 years, which again was a result from the war on drugs. Dunne (1999) agreed by saying that a quarter of the prisoners are serving time for nonviolent drug offenses, and within the last two decades there was about a 400% increase, even though drug usage and trafficking was primarily constant. According to Press (2001), the United Nations Office for Drug Control and Crime Prevention completed a report sharing that drug use in the United States fell 40% from 1985-1999, mostly because the government was spending so

much money on the war on drugs. Despite the government spending $5.6 billion in 1999 to prevent drug usage, there were still more people going to prisons in the United States because of drug related crimes.

In 2007, there were approximately 20 million drug users in the United States according to the report by Bennett, Holloway, and Farrington. (2008). Andrews and Bonta (2006) asserted people using drugs are about three to four times more likely to commit crimes or criminal behaviors than non users. The authors further indicated that more than a half of all the inmates whether local, federal or state in the United States have used drugs at the time of their current criminal behavior. From this information, it can be argued that people using drugs are more likely to engage in criminal behaviors than non users simply because they act under the influence of the consumed drugs (Bagley, White, & Golomb, 2001).

Historically, concerns over drug and alcohol use and crime have caused the criminal justice system in the United States to create punitive responses. Some researchers indicate that the recidivism rate among offenders can be reduced by incarcerating drug offenders (Butzin, Saum, & Scarpitti, 2002). However, more recent studies by Birgden (2004) and Bouffard and Richardson (2007) have suggested there is very limited impact of drug offenders' incarceration on recidivism. These studies indicated that the reason offenders recidivate is not because they do not fear punishment but because of their usage of drugs and alcohol (California Department of Alcohol and Drug Programs, 2006).

Bouffard and Richardson (2007) noted offenders who have undergone drug court programs successfully are at a lower rate of going back to their offenses once they are released; and therefore, the criminal justice system has proposed the shift of policy development's focus

from incarceration as the major response of criminals to drug court as one of the treatments. The shift of focus has resulted in several states repealing or amending their mandatory minimum sentences for drug criminals (Castro, Barrington, Walton, & Rawson, 2000). Drug courts ensure the drug criminals are treated for drug addiction rather than basing the responses on punishment alone. California requires all drug offenders to undergo one year community based drug treatment and six months aftercare in order to ensure they are fully and successfully treated for drug and substance abuse (Cunha, Nicastri, Gomes, Moino, & Peluso, 2004). The drug treatment programs and probation are used in California because courts in California acknowledged that nonviolent offenders convicted of a drug charge have the possibility of overcoming their drug addiction and becoming productive community members. The criminal justice system has realized that there is a clear relationship between drug abuse and criminal behaviors, and drug abuse treatment is the best remedy (Dannerbeck, Harris, Sundet, & Lloyd, 2006).

A significant improvement in drug treatment for criminals in the community has been registered especially in terms of quality and availability. Greene (2003) wrote ‘Smart on Crime,’ where prisons are considerably catching up, as the new treatment regime is introduced. Prisons are considered as the most appropriate places to engage drug users in effective treatment in order to prevent them from committing crimes (Langan & Levin, 2002). Basically, when drug offenders are treated for drug addiction, they resume to their normal lives and are able to differentiate what is right and wrong, evil and righteous, legal and illegal, and ethical and unethical. It has become a concern to the criminal and justice system to ensure that drug offenders are not heavily punished for their crimes but instead they are treated for addictions and enabled to behave well in the community (Listwan, Johnson, Cullen, & Latesssa, 2008). The

major aim of this treatment is to break the link between the offenders' drug use and criminal behaviors so that the rates of recidivism are reduced and the offenders have the opportunity to recover and reintegrate with the society once they are released.

Langan and Levin (2002) reported drug abuse makes many offenders describe their lives as a constant search for illegal opportunities. They are encouraged or motivated by the influence of drugs to shop lift, steal cars, and break into people's properties to secure money for their next fix. Drug dependency makes part time offenders full time offenders; therefore, there is a great need for their treatment. If effective treatment, such as drug court, is not recommended to the offenders, high rates of recidivism would be reported. However, some drug misusing criminals commit offenses that are so serious that they are kept in prisons for quite a long period of time (Longshore, Hawken, Urada, & Anglin, 2006). It is a challenge for the criminal and justice systems to ensure that even the small scale offenders are treated from drug addiction in order to reduce the recidivism rates and help them live in peace with other society members (Longshore, Turner, Wenzel, Morral, Harrell, McBride, et al., 2001).

Marlowe, Festiner, Lee, Dugosh, and Benasutti (2006) described three models explaining the link between drug use and criminal behaviors, including the psychopharmacological model, which indicates that some people, either the offender or the victim, may become irrational, excitable and prone to violent behaviors as a result of injection of specific drugs or alcohol for a short or long time. In this case, the psychological and physical effects of specific drugs and substances are emphasized by this model and how this affects the brain which has been scientifically recorded. Lowenkamp, Holsinger, and Latessa (2001) asserted that some drugs or substances have an effect that provokes criminal behaviors in drug users. Conversely, there are

some drugs which have a reverse psychopharmacological effect, such as marijuana (Miethe, Lu, & Reese, 2000). This makes the link between drug usage and crime complex since some drugs contribute to violent behaviors while others try to ameliorate them. The proponents of strict drug laws support their position by citing the effects of particular drugs on the brain causing users to engage in violent activities (Miller & Shutt, 2001).

The economically compulsive model, on the other hand, suggests that some drug abusers engage in economically oriented criminal behaviors like robbery and shop lifting in order to purchase more drugs (Marlowe et al., 2006). Drugs are extremely costly, especially bearing in mind that they are used on a daily basis by users. It becomes economically hard for some addicts to purchase drugs, and they are forced to look for other means of getting money. It seems the activity of drug consumption needs to be supported regularly, so users end up engaging themselves in criminal activities. However, Rempel, Fox-Kralstein, Cissner, Cohen, Labriola, and Farole (2003) did not find any relationship between drugs and crime but suggested that there are several factors or motivations that are related to drug abuse that result in a criminal event.

The systemic violence market is where an individual gets involved with any illegal drug through its distribution and supply (Marlowe et al., 2006). This implies that when an individual is directly involved with the drug market, there is a high possibility of taking drugs and any efforts of preventing him or her may result in committing a crime. This model asserts that violence or aggression may erupt from dealers to users to bystanders. In this case, despite that the drug user may not be directly involved in a crime, the act of drug dealing he or she is involved in may result in criminal behaviors (Roll, Prendergast, Richardson, Burdon, & Ramirez, 2005).

Drug Court

The ratio of the benefits to costs of drug treatment through the criminal justice system is a politically prudent issue in the country (Shaffer, Hartman, & Listwan, 2009). However, the profound changes in the process of treatment of drug offenders within the criminal justice system have brought increased controversy. Drug court is the principal instrument that is used in this transformation. Drug courts are considered an attempt to reduce the costs of the punishments imposed on nonviolent drug criminals while offering treatment to the offenders to reduce recidivism (Saum, Scarpitti, & Robbins, 2001). As Roman, Townsend, and Bhati (2002) stated nonviolent offenders are those criminals who commit crimes that do not involve any threat, attack or harm to the victim but involve public orders, drugs, and property offenses. Judge Herbert Klein, the Dade County Attorney Janet Reno and other officials established the first drug treatment court in Miami-Dade County in Florida, in 1989 (Semple, Zians, & Strathdee, 2008). Currently, there are more than 2000 drug courts in operation, in the United States. The increase in number is attributed to these programs reducing recidivism rates and saving the government's money.

By 1996, approximately 125 drug courts were in operation in more than 45 states and more than 100 jurisdictions had been developed (Taxman & Bouffard, 2003). According to National Institute of Justice (March 2015), by June 2014 there were 3,416 drug courts in the United States. These drug courts include adult, juvenile, federal, veteran, and different types of cases such as child welfare and driving while intoxicated (NIJ, March 2015).

There are several factors that can be attributed to the fervent reception of the concept of drug courts in the United States. These factors include decreased recidivism rates among the

drug court participants, more effective case load management, reduced crowding in jails, and reduced systemic costs (Tyner & Fremouw, 2008). The drug courts have started to demonstrate their effectiveness and conferences are held which involve more and more professionals. This has allowed many in the criminal justice system to gain access to important information on drug courts. In addition, this has helped the proponents of these courts to generate more support from the state and federal governments allowing several nonviolent drug offenders to be treated in the country (U.S. General Accountability Office, 2005). From their establishment, the statistics of drug courts have indicated positive outcomes both to the side of offenders and the government.

Drug courts were developed to work towards breaking the cycle of drugs and crime. In an attempt to solve the problem of drug related crimes, the courts began expediting and consolidating drug criminal cases within their standard criminal justice system (Wagner & Anthony, 2007). As a way of speeding up the judicial process, some jurisdictions in the United States have taken a different strategy whereby rather than working on the symptoms of the influx in drug offenders (crowding in the local courts), they have sought for some techniques or ways of curing the fundamental problems of drug crimes (Weisheit & Fuller, 2004). This resulted in the establishment of drug treatment courts which have been supported by the government because of their effectiveness. It should be noted that the most important solution to drug offenders is to find ways to treat their addictions, instead of penalizing them or jail sentences (Wilson, Mitchell, & MacKenzie, 2006). Studies, such as Wolfe, Guydish, and Termondt (2002) and Weisheit and Fuller (2004), have indicated that most of the drug offenders commit crimes under the influence of drugs, but when they are treated from addictions, their proneness to commit a crime is greatly reduced. Treatment helps the drug users in devising new ways of

earning a living rather than relying on criminal behaviors like shop-lifting, robbery and theft for their living (Wolfe et al., 2002).

Castro et al. (2000) stated that if addiction is a biopsychosocial problem, which increases in the face of penalty, it then means that no amount of jail term, fines, probation or other types of traditional criminal justice sanctions will be effective in preventing the addict from repeating the criminal behavior related to drug abuse. Since actions like incarceration, probation, or loosely supervised parole do not squarely address the addiction of drug abusers, the abusers usually do not respond to this level of treatment. Therefore, it is important to look at the aspect of drug addiction and drug offenders from the perspective of therapeutic and biopsychosocial, which entails biological, psychological, and social factors, in order to ensure that the drug offender's problems are adequately and effectively addressed (Dynia & Sung, 2000).

Drug courts, according to Wolf, Sowards, and Wolf (2003), have become very popular in the treatment of nonviolent drug criminals, especially in communities since the offenders are not only trained to abide by the law, but are also treated for mental and psychological problems that may cause them to get involved in crimes. Collaborative efforts from a team of experts including treatment staff, drug court judges, and probation staff personnel, characterize drug court as a unique system. These professionals work collaboratively to create an environment that enhances public participation, safety, and compliance. The information by Wolf et al. (2003) has been supported by other researchers in the field, like Wilson et al. (2006) asserted that the most effective method of treating drug offenders is through drug courts because their behaviors are clearly monitored by the court and they are enabled to reintegrate into the community. More importantly, drug courts have proved to be the best way in the United States since drug offenders

are helped to reduce addiction, which minimizes drug related crimes (Taxman & Bouffard, 2003). Rehabilitation in this process is very essential, and the drug court judge plays a critical role in ensuring that drug offenders' behaviors are changed through rehabilitation. The judge is also in charge of monitoring the progress of the offenders in order to evaluate the effectiveness of these courts. Participants in drug courts are held accountable for their actions where they are punished for wrong doing and rewarded for their good behaviors, ensuring that there is compliance with the program rules (Taxman, Cropsey, Young, & Wexler, 2007). Intensive services are provided to drug offenders through individual educational services, individual counseling, vocational training, mental health services, prosocial support, status review hearings, and after care services.

Extensive studies by Wolf et al. (2003), US Genereal Accountability Office (2005), Shaffer et al. (2009) and many more, have been conducted on drug courts with an aim of evaluating their efficacy in as far as reducing recidivism rates among nonviolent drug offenders is concerned. Weitzel, Nochajski, Coffey, and Farrell (2007), for one, indicated that drug courts have enjoyed enormous support despite the revelation in meta-analyses studies that drug courts reduce recidivism by an average of 10%, far below the recommended rate. Studies, including Staton, Mateyoke, Leukefeld, Cole, Hopper, Logan, and Minton. (2001), and Stoops, Tindall, Mateyoke-Scrivner, and Leukefeld (2005), have indicated that the most effective correctional program should reduce recidivism rates by about 26-30%, indicating that drug courts should have effective interventions so that they can offer quality treatment to offenders. Critics of drug courts have indicated that they are not the most effective correctional programs as they only reduce recidivism rates by very low percentage (Staton et al., 2001). In addition, the critics assert

that drug courts have failed to adhere to the risk principle, which is the probability of recidivism. The risk principle states that offenders' risk level should always be matched with the intensity of services they receive; meaning the services the offenders receive should be determined by the risk level. This suggests that offenders with high likelihood of reoffending should be provided with the most intense services (Stoops et al., 2005). A number of researches on risk level and correctional programs have indicated that intensive correctional programs focusing on higher risk offenders are more effective as compared to those that focus on intense services on low risk criminals (Staton et al., 2001; Stoops et al., 2005). This shows that the correctional program effectiveness can be reduced by violation of the risk principle that is, providing low risk offenders with intensive services (Substance Abuse and Mental Health Services Administration, 2008). The Level of Service Inventory-Revised is a tool that determines that risk level and what type of services are needed.

The Level of Service Inventory- Revised (LSI-R)

The Level of Service Inventory-Revised (LSI-R) is a survey of criminal characteristics as well as their solutions relevant to their level of treatment and supervision decisions. The LSI-R was introduced in the Corrective Services in the New South Wales in the year 2002 as a tool for assessing the risk of offending and needs of offenders (Deschenes, Ireland, & Kleinpeter, 2005). Arguments for the widespread use of this instrument have asserted that the LSI-R has greater consistency as well as credibility concerning decisions made about criminals' risk of recidivism as compared to unstructured professional judgments. The psychometric properties of the LSI-R in New South Wales have been investigated by several studies using international samples (Dannerbeck et al., 2006). This survey is conducted quantitatively and is designed for

offenders aged 16 years and above. Offenders' outcomes, recidivism rates, institutional misconduct, and any success in correctional halfway houses are predicted using the LSI-R score (Holsinger, Lowenkamp, & Latesssa, 2004). This test has 54 items which are based on legal requirements whereby relevant factors required in the decision making processes about risk and treatment are included. The LSI-R is mainly used by parole and probation officers as well as correctional workers in jails, correctional halfway houses, and detention facilities to assist in making decisions concerning placement and probation, in the allocation of resources, in the assessment of treatment progress, and in making accurate and appropriate security level classifications (Holtfreter & Cupp, 2007). The LSI-R assessment tool is mostly used by probation staff in determining the risk of offenders to engage in criminal behaviors and their treatment needs. This study was aimed at determining whether there is a positive correlation between the LSI-R score and the outcome of the probationer completing the drug court program successfully or unsuccessfully (Dynia & Sung, 2000). Specifically, such a correlation would mean that if the score attained on the LSI-R is below the cutoff score, then it is more likely that the probationer will be successful at completing a drug court program. Conversely, if the score of the LSI-R is higher than the cutoff score, then it is likely that the probationer will not be successful at completing a drug court program (Dannerbeck et al., 2006). Finally, it could have been determined that there is no correlation between the LSI-R score and the probationer's likelihood of completing the drug court program successfully or unsuccessfully. But, if a correlation was found between the two, it could mean that the probation officer could look at the LSI-R score and predict probationer's success in a drug court program (Cosden, Basch, Campos,

Greenwell, Barazani, & Walker, 2006). The probation officers are trained before they conduct LSI-Rs and then a follow up training after a year.

There has been research conducted on the LSI-R, including Lowencamp, Holsinger, Brusman-Lovins, and Latessa (2004) that tested the LSI-R for reliability and how it estimated risk. It was beneficial to this study to show reliability in the LSI-R, which was the tool utilized. Shaffer, Hartman, Listwan, Howell, and Latessa (2011) researched the recidivism rates among drug court clients by their drug of choice. Their study focused on whether drug court clients reoffend after they have already been in drug court. This is connected with the study I conducted because if the drug court participants reoffend, then they will most likely not be successful at the drug court program. In addition, Guastaferro (2011) looked at the effectiveness of the LSI-R as a risk assessment by analyzing the use of the LSI-R to assess individual's criminogenic needs in the drug court program. Again, Guastaferro's study assisted with this study by testing the LSI-R for effectiveness. This study studied the LSI-R to learn whether there is a correlation between the instrument's scores and the outcome of a probationer in drug court. There are studies of the LSI-R and drug courts working together, but those studies' purposes are to find information to help after the participant is already in the program. There is a gap of information to find the most appropriate participant by using the LSI-R scores. The purpose of identifying the most appropriate participant is to save governments money so that they are not allowing offenders, who are most likely to fail at completing the program, into the drug court. Given a positive correlation between LSI-R and drug court success, the LSI-R could be conducted to screen the potential drug offenders in order to determine if they are most appropriate for the drug court program.

A number of studies have embarked on the use of the LSI-R in assessment of the risks and needs of offenders. Watkins (2011) indicated that the 54 items contained in the LSI-R are grouped into ten subscales: Education/employment, finances, family/marital factor, accommodations, leisure/recreation, alcohol/drug, emotional/personal, attitude/orientation, companions, and criminal history. The total scores of LSI-R are used in the prediction of recidivism risk while criminogenic needs are identified using the individual subscales (Burnes & Peyrot, 2003). For instance, if an individual has a high risk of reoffending because of his education or employment status, the probation officers are able to discern the best way of preventing reoffending. This can be done by providing vocational training to the participant as a way of enabling him or her to earn a living in the community.

The main question asked is whether the instrument is valid and reliable. While a majority of the evaluations suggested that the LSI-R is a very effective instrument in as far as measuring offenders' risks and needs, there is a scarcity of precise evaluation establishing the LSI-R in particular regions in the world like in Australia, the United States, and England, which has called for researchers to base their studies in specific countries in order to investigate the validity and reliability of the LSI-R in specific countries (Fletcher, Lehman, Wexler, & Melnick, 2007).

Farabee, Zhang, and Yang (2011) however, suggested that the LSI-R may require to be tested with each criminal population in order to determine the relationship between the indicated LSI-R scores and the subsequent recidivism rates. The LSI-R risk evaluation scores may change over time since this instrument is composed of both dynamic and static factors. Very little research has been conducted on the dynamic attributes of the LSI-R and additional studies are

required in order to determine whether these dynamic changes in LSI-R scores are related with the consequent changes in recidivism rates (Jolley & Kerbs, 2010).

Gray and Saum (2005) found there were numerous problems with the predictive validity of the "Wisconsin Case Management Classification System" when it was used with criminals in Ohio and New York, regardless of the fact that it was valid in predicting risk with the criminals it had been tested with. The forerunners of the LSI-R instrument indicated that the LSI-R performed effectively with one group of criminals and ineffectively with another (Hartman, Listwan, & Shaffer, 2007). This indicated the importance of addressing the validity and reliability of LSI-R before using it in a correctional program. The initial LSI-R was developed and tested in Canada in the year 1982, but from that time a lot of adjustments and modifications have been done in order to accommodate the current changes. A number of studies on LSI-R as a risk assessment and need identification tool have been conducted and most of them have indicated that the LSI-R has the strongest risk pedigree of any instrument used in predicting risk of reoffending (Houser, Salvatore, & Welsh, 2012).

Theoretical Foundation

Therapeutic jurisprudence theory was established by Professors David Wexler and Bruce Winick in 1991 who suggested that court is therapeutic to people, and the study of the role played by the law as a therapeutic agent is referred as therapeutic jurisprudence. According to Lloyd (2015), a decade earlier the mental health patients' rights movement had an influence on the development of therapeutic jurisprudence. The courts relied on the psychiatrists to make the decisions in the court system regarding the patients or defendants and their treatment (Lloyd, 2015). The movement wanted the power shifted from the psychiatrists to the law, which would

then not allow the court to administer the law therapeutically (Lloyd, 2015). Lloyd (2015) explained that therapeutic jurisprudence acknowledged that the court can provide a therapeutic impact on defendants and a common ground was identified through therapeutic jurisprudence. Davidovitch and Alberstein (2008) also described therapeutic jurisprudence as "an academic body of thinking that arose from the mental health field in 1987."

A discrete forum for the application of the therapeutic jurisprudence theory is provided by the drug courts. Therapeutic jurisprudence theory is based on the idea that the psychological and physical wellbeing of individuals is promoted by the legal rules and procedures (Senjo & Leip, 2001). Lloyd (2015) explained that therapeutic jurisprudence recognizes that rules guide the court to be neutral but also allows them to therapeutically be involved in the patients or defendants. The criminal justice system recognized in the early 1990's that incarceration was not enough alone to rehabilitate offenders who use drugs and commit crimes, and drug courts were a reasonable response to the issues of overpopulation and large caseloads (Davidovitch and Alberstein, 2008). Drug courts are an option that enhance psychological and physical well being without subordinating other values of the justice system, as Davidovitch and Alberstein (2008) explained the fundamentals of therapeutic jurisprudence. In drug courts, offenders participate in numerous legal and treatment processes which are collectively targeted at producing positive and attractive behavioral changes not only for the individual offenders but also the entire society.

As Arrigo (2004) noted, for a long period of time, legal procedures, institutions, rules, and actors have been informed by therapeutic jurisprudence. This doctrine has been applied by many academic criminologists in the interpretation of the criminal justice agencies, programs, and personnel. The main purpose of therapeutic jurisprudence is to examine the impact of the

law on psychological and physical well being of offenders through social and behavioral science research (Birgden, 2004). This study is to determine if there is a statistically significant positive correlation between the LSI-R score and drug court participants' success. The rationale of selecting this theory is to gather more information concerning therapeutic jurisprudence and use it as an analytical instrument in the examination of drug treatment courts.

In an interdisciplinary manner, the theory combines psychology, law, psychiatry, criminology, public health, philosophy, and criminal justice (Hickert, Boyle, & Tollefson, 2009). In its introduction, this theory focused mainly on mental health but later expanded to include legal concepts. The cofounders poised that there was a need to renew academic interest in this sector. It was from this notion that therapeutic jurisprudence perspective was developed and described as a study of the extent to which legal processes, substantive rules, and the roles of judges and lawyers produce anti-therapeutic or therapeutic outcomes for criminals. From this narrow start, therapeutic jurisprudence theory has gained popularity and has been referred to by many researchers and scholars in both health sciences and criminology. According to Miller and Shutt (2001), therapeutic jurisprudence has been used by several authors as an interdisciplinary scholarly approach in the examination of a wide range of legal subjects. This theory has been increasingly used by scholars and educators in many other areas other than mental health law, like domestic violence, corrections, and tort reform among others.

According to Schma (2000), the therapeutic jurisprudence theory assumes that the way the law is carried out is capable of affecting the offender’s wellbeing and the law has social science knowledge that should be able to determine the most effective methods of improving the well- being. This implies that the well-being of an individual can be changed by the application

of the law (Koetzle Shaffer, Kelly, & Lieberman, 2011). For instance, when an offender is brought before the law for wrong doing, the law should utilize that opportunity and initiate a life style to the offender thus changing his life. The theory also suggests a required correctional setting that should be used in improving the therapeutic effects of the law (Lowenkamp et al., 2004). Therapeutic jurisprudence applies to this study by examining the relationship between court action (independent variable) and success at completing the drug court program (dependent variable).

The founders, David Wexler and Bruce Winick, of therapeutic jurisprudence indicated that it represents an important step in the evolution of the application. This step is the step from theory to application (Listwan, Sundt, Holsinger, & Latessa, 2003). Traditionally, therapeutic jurisprudence theory was only learned in theoretical form but it is increasingly under application in many criminology and law studies and institutions. With the introduction of the drug treatment principles to the most drug addicted offenders, the drug treatment courts unwittingly applied the concepts and ideas of therapeutic jurisprudence daily in several of courtrooms across the United States (Marlowe et al., 2006). Once this is realized by the drug treatment courts, the principles of therapeutic jurisprudence can be applied by drug treatment courts in improving existing procedures, increasing the safety of societies across the country, and making greater impact on the lives of drug addicted nonviolent offenders (Mullany & Peat, 2008). The proponents of this theory assert that theories, findings, and philosophies of different disciplines as well as fields of study should be used by society in shaping the development of the law. Patra, Gliksman, Fischer, Newton-Taylor, Belenko, Ferrari, Kersta, and Rehm (2010) suggest that, socio-psychological ways form the main focus of the therapeutic jurisprudence theory whereby laws and legal

procedures impact individuals involved in the legal system. In this case, through the examination of the effects of the law in this respect, the nature in which laws and legal processes support or undermine the public policy reasons for implementing those laws and legal procedures is illuminated by the therapeutic jurisprudence (Saum et al., 2001).

Proponents of therapeutic jurisprudence theory view that others' considerations should be of great importance when looking at the application of therapeutic jurisprudence. This implies that, in many cases other societal values should trump over therapeutic considerations (Substance Abuse and Mental Health Services Administration, 2008). An example is the high value placed on the freedom of the press. This means that despite that an individual's psychological and emotional state may be negatively affected by viewing negative things about him/herself in the media, the society determines that the value of a free press is much more than its potential damaging emotional and psychological effect on the individual (Staton et al., 2001). Therapeutic jurisprudence assumes that only the psychological and mental health aspects of a legal process or a law should be examined to provide information on its potential for success in the achievement of its stated goal, causing therapeutic jurisprudence to be viewed as a tool for achieving a new and unique perspective on matters regarding the law and its applications rather than being viewed as the dominant perspective (Taxman & Bouffard, 2003).

The principles of therapeutic jurisprudence can be effectively applied in the drug treatment courts and its operations. The emergence of these courts and their efficiency across the United States is a reflection of the increased recognition on the part of prosecutors, judges, and the defense counsel that probation, incarceration and parole which are the methods of the traditional criminal justice system have not effectively contained the problem of drug offenders

in the country (Yeh & Doyle, 2005). Wolf et al. (2003) indicated that drug cases are streamlined away from traditional punishment and processing into an intensive drug treatment program. In this case, the psychological and physical well being of drug offenders in drug treatment courts is promoted through substituting the adversarial approach with a more collaborative approach of case management (Wolfe et al., 2002). With drug courts, the drug offenders are not only punished for wrong doing but also treated from drug addictions in order to ensure that they are discouraged from repeating their crimes. The collaborative work of the judge, prosecution, drug treatment providers, probation representatives, and the defense counsel in monitoring the treatment process for the drug offenders would be effective in changing their drug addiction and criminal behaviors (Wilson et al., 2006). This seems to imply that all these professionals must work together in applying 'smart punishment' to drug offenders rather than punishing them hard for the sake of retribution. Criminologists have indicated that retribution is an important method of reducing crime rates in the community but cannot be very effective among drug offenders since they commit crimes out of the influence of drugs (Weisheit & Fuller, 2004).

Addressing the drug offenders' drug related problems effectively is an important component of drug courts in the treatment of offenders. As suggested by the therapeutic jurisprudence, drug offenders are considered as being "sick" or having an illness in the drug courts rather than blameworthy. This helps the court operation to see the need of providing them with effective treatment. Based on the case of Robinson v. California (1962), the U.S. Supreme Court ruled that drug addiction is not illegal, concluding that addicted drug offenders should be considered as sick people who require treatment (Simourd, 2004). As Tyner and Fremouw (2008) note, relapses can occur even when drug offenders are treated since addiction is a disease.

This indicates that the drug treatment court has the responsibility of responding to relapses with progressive sanctions and improves the treatment offered rather than performing an immediate termination of the participant (Shaffer, Listwan, Latessa, & Lowenkamp, 2008).

Offender characteristics are another important component of the application of therapeutic jurisprudence in the drug treatment courts. These are demographic characteristics of offenders that have substantial impact on behavior change. In drug court evaluations, the most important variables include gender, race, education/employment, and age and are very critical in the therapeutic jurisprudence theoretical model (Shaffer, 2006). Stoops et al. (2005) hypothesized that elderly people have lower probability of engaging in drug related criminal behaviors since they are old enough to make well informed decisions rather than relying on peer pressures. Additionally, the authors indicated that males have higher probability of becoming addicted to drugs, which would lead those to engaging in drug related criminal behaviors, as compared to females.

According to Semple et al. (2008), when drug offenders are brought before the drug court immediately, the program is able to create an immediate crisis for the offender and drug abusing behavior can be forced into the open making it very difficult for the offenders to deny it. Adherence to the drug court laws and legal procedures helps in making the treatment process effective and easy while benefiting the offenders and saving the government's money that would otherwise be used in repeating some of the treatment procedures that were omitted (Saum et al., 2001).

Summary and Conclusions

There are mixed reactions to the link between drug use and criminal behaviors. Some scholars maintain that nonviolent drug offenders commit crimes under the influence of drugs. In the United States, most of the drug offenders in prisons were found to have abused drugs before or during committing a crime, which Cunha et al (2004) say indicates that the link between drug abuse and criminal behaviors is very strong. Cunha et al's (2004) study found that criminal behaviors are 3 to 4 times more likely to be committed by people using drugs than by people not using drugs and drugs were used at the time of criminal behavior for more than half of the inmates in the United States. Traditional criminal justice systems used incarceration as a way of reducing recidivism but this method was not the most effective. This is because drug offenders are not considered as blameworthy but as sick people who require treatment (Dannerbeck et al., 2006). Despite that incarceration is one of the ways of ensuring that offenders do not repeat their offenses in the future, it has not been effective since some criminals do not fear to be punished as they are influenced to commit crimes by illicit drugs and substances. In this case therefore, the drug treatment courts have been found as the most effective way of treating drug addiction among drug offenders hence reducing recidivism rates. Since a lot of tax payers' money is used in treating drug offenders to the extent that some criminologists have ruled against its efficiency, the LSI-R score is appropriately used in determining the offenders who should undergo treatment and their completion rates. Successful treatment program completion is influenced by offender demographic characteristics such as age, gender, race, and education/employment (Dynia & Sung, 2000).

The criminal justice practitioners and policymakers can get significant information from this study on the theory of therapeutic jurisprudence and its principles as well as implementation of drug court programs. The findings of the previous studies, such as Schma (2000), Shaffer et al. (2011), and Patra el al. (2010), have indicated that therapeutic jurisprudence mainly focuses on the physical, emotional, and psychological impact of law, legal actors, and legal procedures, impacting the outcomes of the participants. The theory asserts that drug offenders should not be considered as criminals who have broken the laws but as people suffering from mental problems due to drug abuse and need treatment. The criminal justice practitioners and policymakers should know that incarceration is not the best way of preventing or reducing recidivism but addiction treatment can do better.

Chapter 3: Methodology

Introduction

Chapter 1 provided the reader with the background of why and how the LSR-I is used and the need for its use. Chapter 2 stated seminal research from Dannerbeck et al. (2006) and Deschenes, Ireland, and Kleinpeter (2005) regarding current practices, including LSR-I and how they are currently used. Chapter 2 outlined previous studies that focused on the LSI-R assessment tool used by probation officers in determining offenders' risk and their treatment needs. Chapter 3 explores the study's methodology.

The purpose of the study was to determine whether there is a correlation—and to what extent—between the LSI-R score and the success of completing drug court, in order to identify the most appropriate candidates for the drug court program. Chapter 3 discusses the rationale for utilizing the one-way ANOVA for this study. The researcher identifies the variables. In addition, the researcher defines the population, stating the population size. The researcher identifies the sampling strategy. The instrument used in the study was the LSI-R. This chapter discusses the tool, who developed it, and why it was appropriate. In addition, threats to internal and external validity are included in this chapter. Any ethical concerns are discussed in this chapter as well. The data collection procedures, data analysis, and a summary of the chapter are presented.

Research Design and Rationale

Quantitative research is appropriate to test the relationship among variables (Creswell, 2008). The dependent variable in this study was the success of completing the drug court program. The independent variables were the LSI-R score, having an alcohol problem, suspension, addresses, IV drug, employment, and education.

As the objective of this study was to test the difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R and the group of participants who scored 33 or less on their initial LSI-R score, a causal-comparative quantitative research design was used to evalaute the hypothesis by measuring the difference between them the two groups. A causal-comparative quantitative research design was appropriate for measuring the difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R and the group of participants who scored 33 or less on their initial LSI-R score.

The researcher conducted one-way ANOVA procedures in this study to test hypotheses 1-8. A one-way ANOVA enabled the researcher to see 1) if there was a significant difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R than the group of participants who scored 33 or less on their initial LSI-R score, 2) if there was a significant difference in completing drug court successfully between the group of participants who reported ever having an alcohol problem and with the group of participants that reported they have never had an alcohol problem, 3) if there was a significant difference in completing drug court successfully between males and females, 4) if there was a significant difference in completing drug court successfully between the group of participants who reported ever being suspended from school and the group of participants that reported they have never been suspended from school, 5) if there was a significant difference in completing drug court successfully between the group of participants who reported they had 3 or more addresses in the past 12 months and with the group of participants who reported they had less than 3 address in the past 12 months, 6) if there was a significant difference in completing

drug court successfully between the group of participants who reported ever being an IV drug user and the group of participants who reported never being an IV drug user, 7) if there was a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed, and 8) if there was a significant difference in completing drug court successfully between participants with different education levels. There were no time and resource constraints consistent with the design choice.

The study design was consistent with research designs that advance knowledge in the discipline. Van Vleet, Hickert, Becker, & Kunz (2008) used a causal-comparative quantitative research design to advance knowledge in the discipline by explaining the difference in completing drug court successfully between the groups of participants that completed an LSI-R. Van Vleet et al. (2008) found a significant difference in completing drug court successfully between the groups of participants that completed an LSI-R

Methodology

Population

There are currently 14 drug courts in the state of Kansas. The drug court that the participants of this study were attending is located in a county that in 2012, the county population was 503,889. The drug court started in 2008 and consists of adult felons who have been convicted of a probation violation. These adult felons are serving a sentence on probation and have failed to abide by their conditions of probation due to an alcohol or drug addiction. The projected capacity is 120 offenders. The participants have to be voluntary. Thus, the participants have a probation violation and they have to agree to doing drug court, which would be instead of

another sanction or sentence, which could include jail, prison, or a residential setting. Those who typically are seen in this drug court are lower class people and many have mental health issues.

Sampling and Sampling Procedures

This researcher chose the convenience sampling method to select the sample for the study. The convenience sampling method is common when examining the relationship between the success of completing the drug court program and the LSI-R score. It is useful to document that a particular phenomenon occurs within the group selected for the sample (Castillo, 2009). Once the offender is accepted into the drug court program, an Intensive Supervision Officer completes an LSI-R on the offender.

The sample included 210 drug court participants. Everyone that entered into the program from December 2008 through September 2011 was included in the sample. The sample size included 77 females and 133 males. There were 154 whites, 46 blacks, 7 Hispanics, 2 American Indians, and 1 Asian.

Based on the Tabachnick and Fidell's (1996, p. 132) formula, participants should be comprised of a minimum of 105 participants. Tabachnick and Fidell (1996) determined that a medium effect size of alpha = .05 and power = .80 must be applied in the future sample selection. The sample size of the study followed this equation: $N \geq 104 + 1 = 105$ (Tabachnick & Fidell, 1996, p. 132).

Procedures for Recruitment, Participation, and Data Collection

This study utilized secondary data which included the initial LSI-R scores of a drug court program in Kansas of participants that began the program between December 2008 and September 2011. The drug court signed a permission letter for the researcher to utilize the data

for the study. Once the offender is accepted into the drug court program, an Intensive Supervision Officer completes an LSI-R on the offender. Their information is stored in a computer program called TOADS, and the clients file, and put on a spread sheet. The Kansas Department of Corrections utilizes the LSI-R, and stores the information in TOADS. TOADS stores the information forever.

The participants of drug court are voluntary, in the sense they were court ordered to probation, but failed probation, and volunteered to participate in drug court. They are required to complete an LSI-R; therefore, no permission from participants is necessary. The researcher moved the information from the department's excel spread sheet onto a new spread sheet without revealing any names of offenders or other confidential information, such as date of birth or social security numbers. None of the information on the new spread sheet allowed anyone including the researcher to identify participants.

The data used represents the most appropriate source of data for this study. The participants were in the drug court program and had completed an LSI-R that had been scored and reported. There was information regarding if the participants completed the drug court program successfully, or if they were discharged from the program unsuccessfully and if so, for what reason.

Instrumentation and Operationalization

In quantitative research, developed instruments are used (Weiers, 2005). In 1995, Don Andrews, Ph.D. and James Bonta, Ph.D., who are from Canada, developed a needs/risk assessment tool known as the Level of Service Inventory-Revised (LSI-R). The LSI-R was appropriate to the current study because it is an evidence-based tool that can be used to predict

criminal behaviors and reoffending by offenders (Simourd, 2011). Probation officers utilize the tool in order to determine needs of the offenders and risks of the offenders, which assist with determining the level of supervision the offenders require.

Permission was not necessary for this study to use the instrument because the sample of offenders in drug court was required by the court to complete the LSI-R while on probation participating in the drug court program. The study used archived information. The director of Criminal Justice Alternatives helped think of the study because the county could utilize the information to help them decide what potential clients would be most successful for the drug court program, which could potentially save them money.

In a 2003 study by Austin, Coleman, Peyton, and Johnson, a sample of 2,370 inmates who were from the Ontario Ministry of Correctional Services in Canada completed the LSI-R. Austin et al. (2003) tested reliability and validity of the LSI-R. Austin et al. (2003) established validity or reliability in the study sample by confirming the internal reliability and construct validity of the LSI-R. Most of the alpha coefficients were satisfactory by Nunnally's (1978) criterion of .70. The LSI-R had high construct validity.

In a 2001 study by Andrews and Bonta (2001), a sample of 19,481 inmates from seven departments of corrections in the U.S. completed the LSI-R. Andrews and Bonta (2001) established validity or reliability in the study sample by confirming the internal reliability and construct validity of the LSI-R. Most of the alpha coefficients were satisfactory by Nunnally's (1978) criterion of .70. The LSI-R had high construct validity. Thus, the researcher recommends the LSI-R for use an evidence based tool that can be used to predict criminal behaviors and reoffending by offender.

The LSI-R has a total of 54 items, which are divided into 10 domains, including criminal history, education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitude/orientation. In the study, the researcher will use three domains, including financial, emotional/personal, and attitude/orientation. Other domains do not align with the framework. The probation officer or interviewer reviews information from files and history, then conducts an interview with the offender, asking questions verbally. The interviewer records the information. The interviewer completes professional training on how to conduct an LSI-R. The probation officers that work for the drug court complete a week of training on how to administer the LSI-R. If the offender answers "yes" then, there is a risk factor of recidivism/reoffending, and if they answer "no", the risk factor of recidivism/reoffending is not there. The publishers of the LSI-R recommend a scoring guide, but some offices use their own scoring guide. Zero-13 is considered a low risk offender, 14-23 a low moderate offender, 34-40 moderate risk offender, 34-40 a medium high offender, and a 41 and above is a high risk offender (Simourd, 2011).

Data Analysis Plan

Quantitative researchers analyze numeric data (Zikmund, Babin, Carr, & Griffin, 2010). The researcher used the statistical program IBM SPSS Statistics, version 22.0. The researcher cleaned data by replacing missing data by zero and running Outlier Analysis. The researcher tested the assumption of normality (Cook, 1977).

The data analysis was performed primarily to answer the following research question and evaluate the following hypotheses:

Research Question One: To what extent does the initial LSI-R score predict drug court participants' success in the program?

Hypothesis 1: There is a significant difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R than the group of participants who scored 33 or less on their initial LSI-R score.

Null Hypothesis 1: There is no relationship between the LSI-R score and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between the group of participants that scored a total of greater than 33 on their initial LSI-R than the group of participants who scored 33 or less on their initial LSI-R score. The researcher obtained the following measures: "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (a total of greater than 33\33 or less). A between group factor showed the between-groups estimate of variance for the main effect of "a total of greater than 33\33 or less." The error showed the residual variation.

Several other hypotheses were also evaluated.

Hypothesis 2: There is a significant difference in completing drug court successfully between the group of participants who reported ever having an alcohol problem and with the group of participants that reported they have never had an alcohol problem.

Null Hypothesis 2: There is no relationship between having a history of an alcohol problem and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between the group of participants who reported ever having an alcohol problem and with the group of participants that reported they have never had an alcohol problem. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (alcohol problem\no alcohol problem). A between group factor showed the between-groups estimate of variance for the main effect of "alcohol problem\no alcohol problem." Error showed the residual variation.

Hypothesis 3: There is a significant difference in completing drug court successfully between male and females.

Null Hypothesis 3: There is no relationship between gender and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between male and females. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (male\female). A between group factor showed the between-groups estimate of variance for the main effect of "male\female." Error showed the residual variation.

Hypothesis 4: There is a significant difference in completing drug court successfully between the group of participants who reported ever being suspended from school and with the group of participants that reported they have never been suspended from school.

Null Hypothesis 4: There is no relationship between ever being suspended from school and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there is a significant difference in completing drug court successfully between the group of participants who reported ever being suspended from school and with the group of participants that reported they have never been suspended from school. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (suspended from school \ not suspended from school). A between group factor showed the between-groups estimate of variance for the main effect of "suspended from school \ not suspended from school." Error showed the residual variation.

Hypothesis 5: There is a significant difference in completing drug court successfully between the group of participants who reported they have had 3 or more addresses in the past 12 months and with the group of participants who reported they have had less than 3 address in the past 12 months.

Null Hypothesis 5: There is no relationship between having 3 or more residences in the past 12 months and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between the group of participants who reported ever being suspended from school and with the group of participants that reported they have never been suspended from school. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (3 or more addresses \ less than 3 address). A between group factor showed the between-groups estimate of variance for the main effect of "3 or more addresses \ less than 3 addresses." Error showed the residual variation.

Hypothesis 6: There is a significant difference in completing drug court successfully between the group of participants who reported ever being an IV drug user and with the group of participants who reported never being an IV drug user.

Null Hypothesis 6: There is no relationship between ever being an IV drug user and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between the group of participants who reported ever being an IV drug user and with the group of participants who reported never being an IV drug user. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (IV drug user \ no IV drug user). A between group factor showed the between-groups estimate of variance for the main effect of "IV drug user \ no IV drug user." Error showed the residual variation.

Hypothesis 7: There is a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed.

Null Hypothesis 7: There is no relationship between employment and the drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor "employed \ unemployed." A between group factor showed the between-

groups estimate of variance for the main effect of employed \ unemployed. Error showed the residual variation.

Hypothesis 8: There is a significant difference in completing drug court successfully between participants with different education levels.

Null Hypothesis 8: There is no relationship between education levels and drug court participants' success in the program.

The researcher conducted a one-way ANOVA to test if there was a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed. The researcher obtained "Source," "DF," "Sum of Squares," "Mean Square," "F Value," and "Pr>F=." The researcher got a between group factor (high education levels \ low education levels). A between group factor showed the between-groups estimate of variance for the main effect of "high education levels \ low education levels." Error showed the residual variation.

Threats to Validity

Threats to External Validity

The researcher randomly selected a target sample of 210 drug court participants. In the study, the researcher was interested in the relationship between the success of completing the drug court program and the LSI-R score. The sample included 77 females and 133 males, in the age ranged from 19 to 66 years. The researcher selected 21 drug court participants that were in the age range of 19-66 years so her sample of the population did not represent all human beings. The researcher could not generalize the relationship between the success of completing the drug court program and the LSI-R score among drug court participants in the age range of 18 years or

younger, and 67 years or older. Thus, the researcher did not generalize the relationship between the relationship between the success of completing the drug court program and the LSI-R score to other human beings.

Threats to Internal Validity

Selection bias may happen when more than one type of person is in one group for a study. In this study, there may have been a difference between the people who answered the questionnaire and the people who did not answer the questionnaire. A history threat may have occurred if events occurred to participants during the study that affected results but did not have a relationship with the independent variable. In the study measuring the relationship between the success of completing the drug court program and the LSI-R score, participants may seek out other means of criminal behaviors and reoffending by offenders. A regression threat may happen when the researcher has a nonrandom sample from a population. In the study, the researcher had a random sample from a population. In the study, a person could drop from the study at any time, and a mortality threat may occur when more of one type of person may drop out of the study.

Threats to Construct Validity

Most of the alpha coefficients were satisfactory by Nunnally's (1978) criterion of .70. Austin et al. (2003) and Andrews and Bonta (2001) expressed construct validity as reliability. The LIS-R had high construct validity.

Ethical Procedures

The present study conformed to the ethical guidelines for the Protection of Human Subjects set forth by the American Psychological Association (APA, 2006) and federal laws (45CFR, Part 46.102;46.103[c]). Permission was not necessary for this study to use the

instrument because the sample of offenders in drug court was required by the court to complete the LSI-R while on probation participating in the drug court program. Permission was obtained through a letter from the drug court to utilize the secondary data. The study used archived information. The researcher submitted the study for IRB approval. Scholars have shown that LSI–R scores predict recidivism. For example, in a 2003 study by Austin, Coleman, Peyton, and Johnson, a sample of 2,370 inmates who were from the Ontario Ministry of Correctional Services in Canada completed the LSI-R. Austin et al. (2003) tested reliability and validity of the LSI-R. Most of the alpha coefficients were satisfactory by Nunnally's (1978) criterion of .70. The LSI-R had high construct validity.

Summary

The participants included men and women in the age range from 18 to 69 years. The purpose of this study was to test the relationship between the LSI-R score and the success of completing drug court. A one-way ANOVA was used to evaluate the primary hypothesis by measuring the correlation between the LSI-R score and the success of completing drug court. Secondary data was utilized in this study. The data included the initial LSI-R scores of the participants in a Kansas drug court that began the program between December 2008 and September 2011. The researcher used a one-way ANOVA in this study to test hypothesis 1 -8. Chapter 4 summarizes the collected data and presents the results of the study.

Chapter 4: Results

This chapter presents the results of this study, Program analysis of LSI-R: Do the initial drug court LSI-R scores influence the probationers' success at completing the program? The chapter is divided into four main sections. The first section presents a demographic profile of participants included in the study and descriptive results for pertinent aspects of the investigated database. The second section presents the results of the statistical analysis that was conducted. The third section uses the statistical analysis to provide an answer to the research question and evaluate the additional hypotheses. The fourth section provides a summary of the chapter.

Demographic Profile and Descriptive Results

Data on 210 drug court potential participants were gathered from a database provided by a Kansas drug court. Information about the successful or unsuccessful outcome of their involvement in the drug court was not recorded in the database for 30 of these individuals. Since the dependent variable for the study was drug court outcome, these individuals were excluded from the study, reducing the database to 180 participants. Of these individuals, data on LS-RI score was missing for two individuals. Since LSI-R score was the independent variable for the study's research question, these two individuals were also eliminated from the participants, leaving a final database of 178 individuals who had been assigned to this drug court in Kansas.

Of the 178 individuals in the final database, 65 were females and 113 were males. Racial/ethnic makeup of the final sample consisted of 130 Caucasians, 42 African Americans, 5 Hispanics, and 1 Native American. Ages of those in the study ranged from 19 to 66 years, with a mean age of 34.5 years and a standard deviation of 10.9. LSI scores ranged from 13 to 47, with a mean score of 31.4 and a standard deviation of 6.8.

Data on six key characteristics of the participants was available in the database.

- Employment: 54 were employed and 119 were not employed.
- Education: Highest grade completed was from third to 12th, with a mean of 10.7.
- School suspension: 104 had been suspended and 69 never suspended.
- Addresses: 58 had three or more addresses in 12 months and 115 had fewer.
- Ever having an alcohol problem: 114 said they had and 59 said they had not.
- Ever being an IV drug user: 11 said they had and 162 said they had not.

For each of the variables regarding employment, highest grade completed, school suspension, addresses in the previous 12 months, ever having an alcohol problem, and ever being an IV drug user, information was missing for five participants. These participants were retained in the final sample because outcome information and LSI score information was present for all five participants and thus the main research question and its associated hypotheses could be evaluated. However, these five participants were not included in statistical procedures to evaluate hypotheses about the relation of drug court outcome to the six variables for which their information was missing. Table 1 provides a summary of demographic and descriptive information for the final sample.

Results of Statistical Analysis

A one-way ANOVA procedure was used to determine whether there was an association between the dependent variable of participants' drug court outcome and the

Table 1

Demographic and Descriptive Information for the Sample

Characteristic	Distribution or Range	Mean (SD)
Gender	Male 113 Female 65	
Racial/Ethnic Makeup	Caucasian 130 African American 42 Hispanic 5 Native American 1	
Age	19 to 66	34.5 (10.9)
LSI Score	13 to 47	31.4 (6.8)
Employed	Yes 54 No 119	
Highest Grade	Range: 3-12	10.7
Suspended from School	Yes 104 No 69	
Three or More Addresses	Yes 58 No 115	
Alcohol Problem	Yes 114 No 59	
IV Drug User	Yes 11 No 162	

independent variable consisting of the participants' LSI-R scores. The finding of the ANOVA was then used to answer the research question and evaluate the research question's associated hypotheses. The one-way ANOVA procedure was also used to evaluate an additional seven sets of null and alternative hypotheses related to the possible association of seven other independent variables to the participants' drug court outcomes. To supplement and confirm the ANOVA results, Pearson's Chi-square approximation was also calculated for all comparisons of the dependent variable of drug court outcome with participants' LSI-R scores and the other seven independent variables.

Before conducting any further statistical analysis, participants' LSI-R scores were checked for normality and for outliers. A histogram revealed that LSI-R scores were normally distributed. An outlier analysis of LSI-R scores using the outlier labeling rule of Hoaglin, Iglewicz, and Tukey (1986) showed there were no outliers among the participants' LSI-R scores.

Statistical Analysis for the Research Question

The study's research question regarding participants in the drug court program was the following:

To what extent does the initial LSI-R score predict drug court participants' success in the program?

Two hypotheses, a null hypothesis and an alternative hypothesis, were posed for this research question:

Hypothesis 1: There is a significant difference in completing drug court successfully between the group of participants who scored a total of greater than 33 on their initial LSI-R compared to the group of participants who scored 33 or less on their initial LSI-R score.

Null Hypothesis 1: There is no relationship between the LSI-R score and the drug court participants' success in the program.

A one-way ANOVA procedure was conducted to determine whether there was any significant association between participants' score on the LSI-R and their success in the drug court program. Participants were divided into two groups: those with LSI-R scores of 34 or more in one group and those with scores of 33 or less in the second group, because scores below 34 indicate a low to moderate risk level and need for supervision, and scores 34 and above indicate a medium to high risk and need for supervision (Kansas Sentencing Commission, 2014). Outcome of drug court was divided into two categories: participants who were unsuccessful (1) and participants who were successful (2). The ANOVA results showed that the participants' LSI-R scores were significantly related, at the .01 level, to the successful or unsuccessful outcome of participants' drug court assignment. The direction of the relationship was shown by the finding that the mean outcome for the higher-scoring group of participants was 1.38, while the mean outcome for the lower-scoring group was 1.10. This finding showed that the higher-scoring group had a greater mean success rate than those in the lower-scoring group. The higher-scoring group was thus significantly more likely to be successful in the drug court program.

Because the dependent variable of outcome was a categorical variable with only two possible values, a Pearson's Chi-square approximation procedure was also calculated to further validate the findings from the ANOVA. Results from the Pearson's Chi-square approximation also showed a significant association at the .01 level between participants' scores on the LSI-R and their successful completion of drug court. Results for the statistical analyses to answer the study's research question are summarized in Table 2.

Table 2

Statistical Results Comparing LSI Score to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
LSI-R > 33	107	1.38	.488	.047
LSI-R < 34	38	1.10	.300	.036

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	3.457	1	3.457	19.252	.000**
Within Groups	35.056	176	.180		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	58.151	30	.002**

**Significant at the .01 level.

Statistical Analysis for Additional Hypotheses

Several additional hypotheses concerning the relationship of various characteristics of the participants to their successful or unsuccessful outcome in the drug court program were also

evaluated statistically. In these procedures, the characteristics served as independent variables while drug court outcome served as the dependent variable. The participant characteristics comprised the following: having ever had an alcohol problem, gender, having ever been suspended from school, having three or more addresses during the past 12 months, having ever been an IV drug user, being currently employed vs. unemployed, and highest grade completed in school. In evaluating each hypothesis, a one-way ANOVA was performed comparing the independent variable to the dependent variable of drug court outcome. To supplement and confirm the ANOVA results, a Pearson's Chi-square approximation procedure was conducted.

The first set of additional hypotheses evaluated in this study was the following:

Hypothesis 2: There is a significant difference in completing drug court successfully between the group of participants who reported ever having an alcohol problem and the group of participants who reported they had never had an alcohol problem.

Null Hypothesis 2: There is no relationship between having a history of an alcohol problem and the drug court participants' success in the program.

A one-way ANOVA procedure was conducted to determine whether there was any significant association between participants' having ever had an alcohol problem and their success in the drug court program. Participants were divided into two groups: those who reported never having an alcohol problem (Group 1) and those who reported having had an alcohol problem (Group 2). Outcome of drug court was divided into two categories: unsuccessful results (designated 1) and successful results (designated 2). The ANOVA results showed that whether participants had ever had an alcohol problem was significantly related, at the .05 level, to the successful or unsuccessful outcome of their drug court assignment. The direction of the

relationship between drug court outcome and having an alcohol problem was shown by the finding that the mean outcome for the participants with no history of an alcohol problem was 1.36, while the mean outcome for the participants who had had an alcohol problem was 1.21. This finding showed that the participants reporting having had no alcohol problem had a greater mean success rate in the drug court program than those who reported having had an alcohol problem. Participants reporting no alcohol problem were thus significantly more likely to be successful in the drug court program than those who reported having had an alcohol problem.

Pearson's Chi-square approximation procedure was also calculated to further validate the findings from the ANOVA procedure. Results from the Pearson's Chi-square approximation also showed a significant positive association between participants' never having had an alcohol problem and their success in the drug court program at the .05 significance level. Results for the statistical analyses comparing participants' history of having or not having an alcohol problem to their drug court program outcome are summarized in Table 3.

Table 3

Statistical Results Comparing Participants' History of an Alcohol Problem to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
No Alcohol Problem	59	1.36	.483	.063
Alcohol Problem	114	1.21	.409	.038

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.822	1	.822	4.329	.039*
Within Groups	32.473	171	.190		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	4.271	1	.039*

*Significant at the .05 level.

The second set of additional hypotheses that was evaluated in this study was the following:

Hypothesis 3: There is a significant difference in completing drug court successfully between males and females.

Null Hypothesis 3: There is no relationship between gender and the drug court participants' success in the program.

A one-way ANOVA procedure was conducted to determine whether there was any significant association between participants' being male or female and their success in the drug court program. The participants were divided into two groups: females (Group 1) and males (Group 2). Outcome of drug court was divided into two categories: unsuccessful results (designated 1) and successful results (designated 2). The results of the ANOVA procedure showed that while females were somewhat more successful than males in regard to success in the drug court program, this difference did not rise to the level of statistical significance.

Pearson's Chi-square approximation procedure was also calculated to further validate the findings from the ANOVA procedure. Results from the Pearson's Chi-square approximation also showed no significant relationship between participants' gender and their success or failure in the drug court program. Results for the statistical analyses comparing gender to drug court outcome are summarized in Table 4.

Table 4

Statistical Results Comparing Participants' Gender to Their Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
Female	65	1.31	.465	.058
Male	113	1.25	.434	.041

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.148	1	.148	.747	.389
Within Groups	34.908	176	.198		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	.752	1	.386

The third set of additional hypotheses evaluated in this study was the following:

Hypothesis 4: There is a significant difference in completing drug court successfully between the group of participants reporting being suspended from school and the group of participants reporting never being suspended from school.

Null Hypothesis 4: There is no relationship between ever being suspended from school and the drug court participants' success in the program.

A one-way ANOVA procedure was conducted to determine any significant association between participants who reported ever being suspended from school and their success in the drug court program. The participants were divided into two groups: those who reported being suspended from school (Group 1) and those reporting never being suspended from school (Group 2). Outcome of drug court was divided into two categories: unsuccessful (designated 1) and successful (designated 2). ANOVA results showed that whether participants had ever been suspended from school was significantly related, at the .05 level, to the outcome of their drug court assignment. The direction of the relationship was shown by the finding that the mean outcome for the participants with no suspension from school was 1.36, while the mean outcome for those who had been suspended from school was 1.19, indicating that participants reporting not being suspended from school had a greater mean success rate in the drug court program than those who reported that they had been suspended. Participants reporting never being suspended from school were thus significantly more likely to be successful in the drug court program than those reporting being suspended.

Pearson's Chi-square approximation procedure was also calculated to validate findings from the ANOVA. Results from the Pearson's Chi-square approximation also showed a

significant positive relationship, at the .05 level, between never being suspended from school and drug court program success. Results for statistical analyses comparing suspension in school to drug court outcome are summarized in Table 5.

The fourth set of additional hypotheses evaluated in this study was the following: Hypothesis 5: There is a significant difference in completing drug court successfully between the group of participants who reported they had three or more addresses in the past 12 months and the group of participants who reported they had less than three addresses in the past 12 months. Null Hypothesis 5: There is no relationship between having three or more residences in the past 12 months and participants' success in drug court.

A one-way ANOVA was conducted to determine any significant association between participants who did or did not report having three or more addresses in the past 12 months and their drug court success. The participants were divided into two groups: those who reported three or more addresses in the past 12 months (Group 1) and those reporting not having three or more addresses in the past 12 months (Group 2). Outcome of drug court was divided into two categories: unsuccessful results (designated 1) and successful results (designated 2). ANOVA results showed that whether participants reported having three or more addresses in the past 12 months was significantly related, at the .05 level, to their success in drug court. The direction of the relationship was shown by the finding that mean outcome for the participants with three or more addresses was

Table 5

Statistical Results Comparing Suspension from School to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
Suspended	104	1.19	.396	.039
Never Suspended	69	1.36	.484	.058

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	1.199	1	1.199	6.388	.012*
Within Groups	32.096	171	.188		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	6.230	1	.013*

*Significant at the .05 level.

1.16, while the mean for those with less than three addresses was 1.31, indicating that Group 2 had greater mean success in drug court than Group 1. Participants reporting not having three or more addresses were thus significantly more likely to be successful in drug court than those reporting three or more addresses.

Pearson's Chi-square approximation procedure was calculated to validate findings from the ANOVA. Results from the Pearson's Chi-square approximation also showed a significant positive relationship, at the .05 level, between never being suspended from school and drug court program success. Results for statistical analyses comparing suspension in school to drug court outcome are summarized in Table 6.

The fifth set of additional hypotheses evaluated in this study was the following:
Hypothesis 6: There is a significant difference in completing drug court successfully between the group of participants who reported ever being an IV drug user and with the group of participants who reported never being an IV drug user.
Null Hypothesis 6: There is no relationship between ever being an IV drug user and the drug court participants' success in the program.

A one-way ANOVA was conducted to determine any significant association between participants who did or did not report ever being an IV drug user. The participants were divided into two groups: those who reported ever being an IV drug user (Group 1) and those reporting never being an IV drug user (Group 2). Outcome of drug court was divided into two categories: unsuccessful results (designated 1) and successful results (designated 2). ANOVA results showed that participants who had used IV drugs

Table 6

Statistical Results Comparing Having Three or More Addresses to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
Three or More	58	1.16	.365	.048
Less than Three	115	1.31	.466	.043

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.961	1	.961	5.082	.025*
Within Groups	32.334	171	.189		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	4.993	1	.025*

*Significant at the .05 level.

were somewhat more likely to have been successful in the drug court program; however, this difference did not rise to the level of being statistically significant. The slightly increased likelihood may have been affected by the fact that the number of participants reporting having been an IV drug user was small (11).

Pearson's Chi-square approximation procedure was also calculated to validate findings from the ANOVA. Results from the Pearson's Chi-square approximation also showed that there was no significant relationship between having been an IV drug user and success in the drug court program. Results for statistical analyses comparing having been an IV drug user and drug court outcome are summarized in Table 7.

The sixth set of additional hypotheses evaluated in this study was the following:

Hypothesis 7: There is a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed.

Null Hypothesis 7: There is no relationship between employment and the drug court participants' success in the program.

A one-way ANOVA was conducted to determine any significant association between participants who did or did not report being currently employed. The participants were divided into two groups: those who reported not being currently employed (Group 1) and those who reported being currently employed (Group 2). Outcome of drug court was divided into two categories: unsuccessful results (designated 1) and successful results (designated 2). ANOVA results showed that being currently employed was significantly related, at the .01 level, to their success in drug court. The

Table 7

Statistical Results Comparing Having Been an IV Drug User to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
IV Drug User	11	1.36	.505	.152
Not IV Drug User	162	1.25	.436	.034

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.126	1	.126	.649	.422
Within Groups	33.169	171	.194		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	.654	1	.419

direction of the relationship was shown by the finding that mean outcome for the participants who were not currently employed was with three or more addresses was 1.17, while the mean for those who were currently employed was 1.46, indicating that Group 2 had greater mean success in drug court in comparison to Group 1. Participants reporting that they were currently employed were thus significantly more likely to be successful in the drug court program than those reporting that they were not currently employed.

Pearson's Chi-square approximation procedure was calculated to further validate findings from the ANOVA. Results from the Pearson's Chi-square approximation also showed a significant positive relationship, at the .01 level, between being currently employed and success in the drug court program. Results for statistical analyses comparing suspension in school to drug court outcome are summarized in Table 8.

The seventh set of additional hypotheses evaluated in this study was the following:
Hypothesis 8: There is a significant difference in completing drug court successfully between participants with different education levels.
Null Hypothesis 8: There is no relationship between education levels and drug court participants' success in the program.

The participants reported their highest levels of education as ranging from third grade to 12th grade. Several one-way ANOVA procedures were conducted to determine any significant association between participants with different education levels. An

Table 8

Statistical Results Comparing Current Employment to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
Not Employed	119	1.17	.376	.034
Employed	54	1.46	.503	.068

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	3.230	1	3.230	18.373	.000**
Within Groups	30.065	171	.176		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	16.784	1	.000**

**Significant at the .01 level.

ANOVA comparing all educational levels reported by participants to success of their drug court outcome showed no significant difference among education levels (P = .305), which was further confirmed by a Pearson's Chi-square approximation (P = .299). A second ANOVA comparing participants with a 12th grade education with all participants at lower levels of education showed no significant difference between the two groups in their drug court success (P = .112), which was further confirmed by a Pearson's Chi-square approximation (P = .110). An ANOVA comparing participants with an 11th or 12th grade education with all participants at lower levels of education also showed no significant difference between the two groups (P = .343), which was further confirmed by a Pearson's Chi-square approximation (P = .340). Finally, an ANOVA comparing participants who had a ninth grade education or above with participants who had less than a ninth grade education also showed no significant difference between the two groups (P = .300), which was further confirmed by a Pearson's Chi-square approximation (P = .297).

These results indicated that there was no significant difference between participants at different educational levels in their success in the drug court program. Results for analyses comparing participants with a 12th grade education with those at lower educational levels, which was the comparison resulting in the highest P-value, are summarized in Table 9.

Table 9

Statistical Results Comparing 12th Grade Education Level to Drug Court Outcome

ANOVA Results

Descriptives

(Outcomes: Unsuccessful = 1; Successful = 2)

	N	Mean	Std. Dev	Std. Error
12th Grade Level	71	1.32	.471	.041
Below 12th Grade	102	1.22	.413	.056

	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.491	1	.491	2.557	.112
Within Groups	32.804	171	.192		

Pearson's Chi Square Results

	Value	df	Significance (2-sided)
Pearson Chi-Square	2.549	1	.110

Answering the Research Question and Evaluating Additional Hypotheses

The research question concerned to what extent their LSI-R score predicted drug court participants' success in the program. In particular, it was of interest whether participants who scored higher (34 or greater) on the LSI-R had a significantly greater probability of success in drug court than those who scored lower (33 or less). The statistical analyses that were conducted to provide an answer to this question showed that there was a significant positive relationship at the .01 level between participants' higher LSI-R score and their success in the drug court program. Thus, the null hypothesis that there would be no such relationship was rejected and the alternative hypothesis was accepted:

There is a significant difference in completing drug court successfully between the group of participants who scored a total of greater than 33 on their initial LSI-R compared to the group of participants who scored 33 or less on their initial LSI-R score.

The first of seven additional sets of hypotheses concerned whether there was a significant difference in drug court success between participants who reported ever having an alcohol problem and those who reported never having an alcohol problem. Statistical analyses examining these hypotheses found that there was a positive significant relationship between reporting no prior alcohol problem and drug court success. Thus, the null hypothesis was rejected and the alternative hypothesis accepted:

There is a significant difference in completing drug court successfully between the group of participants who reported ever having an alcohol problem and the group of participants that reported they have never had an alcohol problem.

The second set of additional hypotheses concerned whether there was a significant relationship between gender and the drug court participants' success in the program. Results of statistical analyses for evaluating these hypotheses were that there was no significant relationship between gender and success in drug court. Thus, the null hypothesis was accepted:
There is no relationship between gender and the drug court participants' success in the program.

The third set of hypotheses evaluated concerned whether there was a significant relationship between participants reporting that they had ever been suspended from school and their success in the drug court program. Statistical analyses evaluating these hypotheses revealed that there was a negative significant relationship at the .05 level between reporting being suspended from school and success in the drug court program. Thus, the null hypothesis was rejected and the alternative hypothesis accepted:
There is a significant difference in completing drug court successfully between the group of participants reporting being suspended from school and the group of participants reporting never being suspended from school.

The fourth set of additional hypotheses concerned whether having or not having three or more addresses in the past 12 months was significantly associated with success in drug court. Statistical analyses examining these hypotheses revealed that there was a significant negative relationship at the .05 level between having three or more addresses over the past 12 months and drug court success. Thus, the null hypothesis was rejected and the alternative hypothesis was accepted:

There is a significant difference in completing drug court successfully between the group of participants who reported they had three or more addresses in the past 12 months and the group of participants who reported they had less than three addresses in the past 12 months.

The fifth set of additional hypotheses concerned whether there was a significant difference between participants who did or did not report ever being an IV drug user and their success in the drug court program. Statistical analyses conducted to evaluate these hypotheses showed that there was no significant difference between the two groups in their drug court success. Thus, the null hypothesis was accepted:

There is no relationship between ever being an IV drug user and the drug court participants' success in the program.

The sixth set of additional hypotheses concerned whether there was a significant difference between participants who did or did not report being currently employed. Statistical analyses for evaluating these hypotheses revealed that the participants who reported being currently employed were more likely to be successful in the drug court program at the significance level of .01. Thus, the null hypothesis was rejected and the alternative hypothesis accepted:

There is a significant difference in completing drug court successfully between participants who reported currently being employed and participants who reported currently being unemployed.

The seventh set of additional hypotheses evaluated concerned whether there was a significant difference between participants who were at different education levels and their success in the drug court program. Statistical analyses to evaluate these hypotheses revealed that

there was no significant difference between participants at different education levels and their drug court success. Thus, the null hypothesis was accepted:

There is no relationship between education levels and drug court participants' success in the program.

Chapter Summary

This chapter reported the results of the study. The first section of the chapter presented a demographic profile of the participants and provided descriptive information about the participants in regard to the study's key variables. The first section also explained how missing information on two key variables resulted in reducing the number of participants to a final sample of 178 individuals.

The second section of the chapter detailed the results of statistical analyses performed to answer the research question and evaluate additional hypotheses. One-way ANOVAs were conducted as the primary statistical procedure, and Pearson's Chi-square approximations were also conducted to supplement and confirm the ANOVA results.

The third section of the chapter used the statistical results to answer the study's research question and to evaluate several additional hypotheses. Significant statistical results were found indicating that drug court success was positively associated with LSI-R score, reporting never having an alcohol problem, reporting never having been suspended from school, reporting having had less than three addresses over the past 12 months, and reporting being currently employed. Therefore, in each case, the independent variable was found to predict the likelihood of offenders' success in drug court. These findings have important implications for drug courts and probation officers that will be identified and discussed in the next chapter.

The following chapter provides a discussion and interpretation of the results. Implications of the study for positive social change will be drawn, and limitations of the study will be discussed. Recommendations will also be made, and conclusions will be drawn.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Drug courts were created to reduce the incarceration population while providing drug and alcohol treatment to nonviolent offenders in order to reduce the recidivism rate. The goal of the drug courts is while the probationer reports to drug court, they would rehabilitate and not reoffend. This study examined the assessment tool, the Level of Service Inventory-Revised (LSI-R), which is used to determine the offender's level of risk of reoffending, in order to decide which level of probation the offenders will be monitored. Specifically, this study looked at if there is a positive correlation between the LSI-R score and the outcome of the probationer completing the drug court program successfully or unsuccessfully. The purpose of the study is that if there is a correlation between the LSI-R scores and the outcome of the probationer's success or unsuccess in drug court, then the drug courts could utilize this information to be more careful with their selection of probationers for the program, which would save the governments money by not allowing probationers into the program who are most likely to not complete successfully.

A one-way ANOVA was conducted as the statistical procedure in the study, and to confirm the ANOVA results Pearson's Chi-square approximations were conducted. The one-way ANOVA procedure’s results found that there is a positive correlation between the LSI-R score and the probationer's drug court outcome, whether they completed the program successfully or unsuccessfully, at the .01 level. Other factors were looked at as well, finding that there was also a positive correlation between the probationers completing drug court successfully or not and probationers who had reported never having an alcohol problem, reporting never having been

suspended from school, reporting having had less than three addresses over the past 12 months, and reporting being currently employed. The study also found that there was not a correlation between the drug court outcome and probationers at different education levels, probationers who reported ever being an IV drug user, or the gender of the drug court participants.

Interpretation of Findings

The research question for the study was the following:

To what extent does the initial LSI-R score predict drug court participants' success in the program?

Hypothesis 1: There is a significant difference in completing drug court successfully between the group of participants who scored a total of greater than 33 on their initial LSI-R compared to the group of participants who scored 33 or less on their initial LSI-R score.

Hypothesis 2: There is no relationship between the LSI-R score and the drug court participants' success in the program.

The probationers where separated into two groups, one group with initial LSI-R scores of 33 or less and one group of initial LSI-R scores of 34 or higher. The LSI-R scores are used across the world to determine the risk level of probationers, which a score of less than 34 indicates a low to moderate risk and 34 and above indicates a medium to high risk level and need for supervision. There were two groups for the outcome of drug court, either successful or unsuccessful. It was found that the mean of successful outcome for the higher scoring group of participants was 1.38 and the lower scoring group was 1.10, indicating that the higher scoring group, which is the higher risk group, was more likely to complete drug court successfully.

Chapter 2 discussed peer reviewed articles that describe research that has been conducted on drug courts, the LSI-R, and therapeutic jurisprudence. Dynia and Sung (2000) explained that drug addicted offenders do not usually respond well to the typical sentence of incarceration or probation because it does not address the drug addiction, which is what is driving the offender to commit crimes. Therefore, the addiction and social factors need to be addressed in order for the offender to rehabilitate and not reoffend.

Some critics have suggested that drug courts do not adhere to the risk principle by a lack of determining the level of supervision and services for the offender to receive through a risk tool. This study's findings confirm the research conducted by Stoops, Tindall, Mateyoke, and Leukefeld (2005), who found that high risk offenders should be provided with more intense services and supervision, while low risk offenders should have less intense services and supervision. This study determined that the lower risk offenders, scoring 33 or lower on the LSI-R, were less likely to complete drug court successfully than the higher risk offenders, scoring a 34 or higher on the LSI-R. Stoops et al. (2005) and Staton et al. (2001) conducted researches that show intensive programs that concentrate on higher risk offenders are more successful than ones that concentrate on lower risk offenders. Therefore, an intense correctional program that focuses on low risk offenders will potentially not be effective due to not following the risk principle.

The theoretical foundation of this study is the therapeutic jurisprudence theory, which was found by Professors Wexler and Winick in 1991 and suggests that the court is therapeutic to people and can have a therapeutic impact on people (Lloyd, 2015). The court is guided by policies and rules, but can also utilize procedures and services to provide rehabilitation, since it was found that incarceration alone is not enough to rehabilitate offenders (Lloyd, 2015). In

Chapter 2, Davidovitch and Alberstein (2008) describe how drug courts carryout the fundamentals of therapeutic jurisprudence by providing services and treatment to rehabilitate offenders, while at the same time continuing to exercise the court system.

Therapeutic jurisprudence theory has the assumption that an offender's wellbeing can be affected by how the law is carried out and that the law has the knowledge to be affective through social sciences (Schma, 2000). Lowenkamp, Holsinger, Brusman-Lovins, and Latessa, (2004) explained that the theory indicates that correctional settings should be utilized to improve the therapeutic affects of the law. This study shows that drug courts set out to follow through with therapeutic jurisprudence theory, by a correctional setting affecting the offender's well being through rehabilitation and reducing recidivism. The LSI-R score intends to provide the criminal justice system with not only the level of risk to reoffending, but also risk factors and needs of the offender. For example, this study looked at the risk factor of stable housing. The participants were asked if they had 3 or more addresses in the past 12 months. The group that did not have three or more residencies in the past year was significantly more likely to complete drug court successfully than the group who had lived at 3 or more addresses in the past 12 months. This would be a factor that the court would address with the offender to work on establishing stable housing, which is an example of therapeutic jurisprudence theory at work; the court utilizing social sciences to improve the well being of the offender.

Limitations of the Study

The answers to the questions in the LSI-R are asked verbally by the probation officer to the offender. Chapter 1 explained that an assumption of this study was that the participants answered the questions administered during the LSI-R with honest and correct answers. The

offender answers the questions verbally and the probation officer writes their answers down on paper and then transfers the notes into the computer. It is assumed that all the information is being recorded correctly by the probation officer. The LSI-R score was the independent variable in this study, and the assumptions discussed did not change throughout this study when utilizing the LSI-R scores. The honesty of the drug court participant is an external validity, along with the probation officer scoring the LSI-R without showing any bias.

Geography is a limitation of this study. The current study only looked at offenders participating in a drug court in Kansas. Drug courts in other locations throughout the United States or the world, may have different outcomes due to different social factors, laws, and policies.

Recommendations for Future Studies

Further studies were suggested by Farabee, Zhang, and Yang (2011) to test the LSI-R with each criminal population in order to determine if there was a correlation between the indicated scores and the subsequent recidivism rates, indicating that there may be a change in LSI-R scores throughout time due to the dynamic and static factors that the test is conducted on. Are the dynamic changing LSI-R scores related to the recidivism rate consequent changes?

This study examined how data on six key factors, including employment, education, school suspension, housing stability, ever having an alcohol problem, every being an IV user, and gender. Future studies can concentrate on other factors, such as geography, if the parents were involved in their upbringing, if they are a parent, number of arrests, number of incarcerations, etc. The more information and knowledge that is gained about the most appropriate drug court participant increases the potential for higher success rates, by eliminating

the participants who are less likely to complete successfully. Also, studies in other demographic areas should be conducted because each area may have different results due to the recidivism rate in that area, the procedures and laws. Once the changes are made to who is accepted into the drug court program accordingly to the study's findings, then an additional study should be conducted to compare the success rate of the drug court program after eliminating potential unsuccessful participants.

Implications

Drug courts were established to decrease the jail population and the cost of money spent on nonviolent drug offenders, while providing service to rehabilitate the offenders in order to reduce recidivism. It was decided before, that incarceration is not enough to rehabilitate offenders. The theoretical framework for this study is based on therapeutic jurisprudence, which is a theory that the drug courts have a psychological and emotional impact on the offenders and results in positive outcome. This study's purpose was to determine if there is a relationship with the assessment tool LSI-R score and the drug court participant outcome, and to what extent, if any. Not every offender is going to rehabilitate through the drug court program, proving that the presence of court is not enough, nor is services and treatment, to cure all offenders from reoffending. But as therapeutic jurisprudence explains, the services that the offender may obtain through drug court obviously do have an impact on the outcome and success rate for some offenders.

The study implicates that lower risk level offenders are less likely to complete drug court successfully than higher risk level offenders. The drug court program may be too intense with restrictions and supervision than what is necessary for a lower risk level offender, causing the

offender to not be successful at completing the program. The LSI-R score will determine the risk level of the offender. Currently the judges for the drug court in Kansas in this study determine who is admitted to drug court by sentencing them to probation through the drug court program. The initial LSI-R score is not determined until after the offender is already admitted into the program. Then the risk level and needs are decided through the LSI-R. Therefore, offenders are entering the drug court program who may not be most appropriate for the program, and decreasing the success rate of the program because they are not completing the program successfully. The purpose of this study was to find out if there is a correlation between the LSI-R score and the successful completion of the drug court program. Since the study found there is a positive correlation between the LSI-R score and whether the offender completes drug court successfully, then changes should be made with determining who is accepted into the program. In order to make the change of accepting participants who are more likely to succeed in the drug court program, the LSI-R would have to be administered and scored before the decision was made. This would be necessary because the decision would be determined through the LSI-R score. If the offender is more likely to not succeed in drug court, than the recommendation could be given to the judge to administer an alternative sentence.

Positive social changes occur in more than one way. Government money could be saved by only admitting offenders into the drug court program that were more likely to complete successfully. The program spends money on each participant. If the participant is not successful then money was spent on that offender, when it could have been spent on an offender that would have been more likely to complete the program successfully. When an offender completes the program successfully, they are likely to not use drugs or reoffend, but instead be positive assets

contributing to the community. If a participant is not successful in the program, they will be arrested and placed in jail or they will abscond from the program before that happens. If they abscond, then a warrant will be issued for their arrest. They will be in the community and possibly committing crimes and using drugs, but will eventually end up in jail. All of this cost the government money and different agencies to be involved, when it could have been eliminated by administering the more appropriate sentence at the beginning of the process.

Conclusion

This study discussed the history of the drug courts, including the reason for their development and how they contribute to the justice system. More importantly this study focused on a Kansas drug court program and the assessment tool, the LSI-R, used by drug courts to determine the risk level of the offender and if the LSI-R score has a relationship with the offender's drug court program outcome, more specifically if they complete successfully or not. With the finding that there is a relationship between the two, the recommendations for the drug court program were presented. It is important for the drug court program in Kansas and other agencies to consider the results of this study and the recommendations in order to attempt to improve their program, resulting in positive social change, and saving government money. The biggest factor to remember is that each rehabilitated offender that completes the drug court program successfully, is not only one less drug addicted criminal in the streets, but more importantly, is one more contributing citizen in the community.

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