

**AN EVALUATION OF THE EFFICACY OF THE DUI PILOT COURT  
PROGRAM FOR PROSECUTING HABITUAL DUI OFFENDERS IN  
SEDGWICK COUNTY, KANSAS**

A Thesis by

Adella Christine Rucker

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The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts with a major in Criminal Justice.

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Delores Craig- Moreland, Committee Chair

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Michael Birzer, Committee Member

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Rhonda Lewis, Committee Member

## **DEDICATION**

This is dedicated to my belated grandmother  
Essye Crawford, my belated father  
Jimmie L. Rucker  
and my best friend Membree Littlejohn (King)

## ACKNOWLEDGMENTS

I would first like to thank God for using me as a vessel to fulfill his purpose. I would also like to thank my daughter Jayla L. Neal, my god-son Xavier T. Lee, my step-daughter Johnna Griffin and my fiancée John Griffin for being the fuel that inspired me to accomplish my dreams. I hope that I am the example you need to fulfill all of your dreams!! Mom and Dad, I would like to thank you for the lessons you taught me growing up that allowed me to be independent and realize that dreams are attainable. To Membree LittleJohn (King), thank you for loving and caring for me over the years, you are like a sister to me. To Charlene Taylor and Schwane Riley, I would like to extend a special thanks to you for making me laugh when I felt like crying and for being my “special financial support” team when I needed it. To Dr. Michael Birzer, Dr. Delores Craig-Moreland, Dr. Brian Withrow, Dr. Anna Chandler, Dr. William Hoston, Dr. Marche Fleming- Randle and Dr. Rhonda Lewis thank you for all that you have invested in me. I will continue to strive for excellence in my academic career so that your work will not be in vain. I would also like to thank my co-worker’s Kristen Brewer, Randi Harms and my best friend Philip Pettis for inspiring me at times when I needed inspiration. Last but not least, I would like to thank the Ronald E. McNair staff and faculty members. This program laid the foundation in which I have grown.

## **ABSTRACT**

This study examined participants of the DUI/ Drug Pilot Court Program located in the Eighteenth Judicial District of Sedgwick County, Kansas. A discriminant analysis was conducted to determine if age, number of days in jail, gender, fine amount, number of charges in a single stop, continuances and number of convictions were factors for predicting the outcome group for a given offender. The three outcome groups were: technical violators, new charges and successful completers group. This study also examined the differences of each group. This study utilized secondary data which was provided by the DUI Victim Center of Kansas and the District Attorney's Office. The sample population consisted of 362 offenders and from that 140 cases were selected. This study evaluated the offenders at 2 years post-conviction. The participants that was used in this study were (N= 140), 85.7% (N=120) were male and 14.3% (N=20) were female. The age ranges of the participants were from 19-67 years old.

Results of the discriminant analysis indicate that age, gender, number of days in jail, fine amount and number of charges were significant in determining offender outcome groups. The results also indicate that males in their late 30's are more likely to receive new charges while under the commitment of the court if they spent a significant amount of time in jail while awaiting treatment and rehabilitation. This study also indicates that males in their early 40's are receiving technical violations, but if they get into treatment and rehabilitation faster they are more likely to complete the program successfully.

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# CHAPTER 1

## INTRODUCTION

Nationally every 45 minutes one alcohol- related fatality occurs (National Transportation Safety Board [NTSB], 2010). In 2009 almost 11,000 people died in the United States from an alcohol-related incident (NTSB, 2010). In 2008, Kansas had 65,858 auto accidents statewide, 3,366 were alcohol-related and 131 of those accidents were fatalities (NTSB, 2010). The problem is that repeat offenders represent approximately one-third of drivers arrested or convicted of driving under the influence of alcohol (NTSB, 2007).

Lobbying groups such as Mothers' Against Drunk Drivers (MADD), Remove Intoxicated Drivers (RID) and Student's Against Drunk Driving (SADD), have persuaded federal legislators to require states to pass and implement laws that would crack down on the recidivism amongst DUI offenders or lose funding (Fell, Voas, 2006). Under this pressure the federal government enacted Section 408 (NTSB, 2005). Section 408 is a federal regulation that provides states with federal highways funds if they reduce the fatality rate caused by alcohol-related incidents (NTSB, 2005). States that comply with federal regulations to lower the blood alcohol concentration level from .10 to .08, conduct sobriety checkpoints, offer rehabilitation, and implement DUI and drug courts will be meeting the criteria that qualifies the states for the grant funds under TEA-21 (Transportation Equity Act-21) (NTSB, 2005).

In response to the growing number of repeat DUI offenders, Sedgwick County began investing public resources in more efficient blood alcohol testing equipment, conducting sobriety checkpoints and implementing a county DUI commission board to propose changes in DUI laws. The DUI County Commission Board's purpose is to advise and propose laws that would provide stiffer penalties for drivers under the influence of alcohol by reviewing past and current trends in legislation (K.S.A. 21-4802). The board also reviews literature that would reduce the number of drunk drivers on public highways in an effort to protect society (K.S.A. 21-4802). The DUI County Commission Board is required to prepare and submit reports and recommendations to legislator committees (K.S.A. 21-4802). The staff includes: members from both the House and Senate, municipal and county court judges, a member from the attorney general's office, a DUI prosecuting attorney, a victim advocate, the secretary of corrections, secretary of social and rehabilitation services, secretary of revenue, a defense attorney, a chairperson of the Kansas Sentencing Committee, Kansas Highway Patrol, Kansas Bureau of Investigations, a sheriff, a municipal law enforcement officer, a court services officer, and a parole officer (K.S.A. 21-4802).

In the fall of 2007, Sedgwick County, Kansas implemented a DUI/drug court based on the National Drug Court model; the primary focus of the DUI/drug court is rehabilitating the offender (National Association of Drug Court Professionals [N.A.D.C.P.], 2010). DUI and drug courts have been implemented in various states throughout the United States (N.A.D.C.P., 2010).

An evaluation of drug courts found that these types of courts were the most effective method of community supervision for monitoring the offender and holding offender's accountability (Belenko, 1998).

The Sedgwick County DUI/ drug court program requires an 18-24 month commitment (Sedgwick County Department of Corrections [SCDOC], 2010). The primary goal of the DUI/drug court is to target and address the substance abuse problems of DUI recidivist, reduce jail overcrowding and reduce recidivism rates of habitual offenders by providing treatment as a condition of the imposed sentence [SCDOC], 2010). The DUI/drug pilot court program is conducted in the Eighteenth Judicial District Court of Sedgwick County, Kansas (SCDCH, 2010). The DUI/drug court targets repeat offenders with three or more dui convictions or a drug convictions (SCDCH, 2010).The DUI/drug court is a structured approach in an attempt to address the issue of substance abuse (SDCH,2010). With a court order from the judge, the offender will be placed on supervised probation while attending AA meetings and undergoing frequent and random urine analysis to ensure that the offender is adhering to the commitment of the court (SCDCH, 2010). The DUI/drug pilot court addresses the particular needs of high-risk drunk drivers who have a history of driving while impaired (SCDCH, 2010).

In the State of Kansas offenders are often sent to Comcare.Comcare is an outpatient treatment facility located in Sedgwick County Kansas (Alcohol Treatment Center [ATS] 2011). Comcare provides addiction treatment services to offenders with a history of addiction (ATS, 2011). The average length of time in the program is typically 10-12 weeks (ATS, 2011). The staff consists of mental health professionals and addiction

counselor's that evaluate, lecture, and provide cognitive behavioral, relapse services and the 12-step programs to offenders that have been referred or court-ordered to attend (ATS, 2011). The 12-step program requires the offenders to provide a detailed account of circumstances and stressors that may have lead them to encounter their substance abuse problems (ATS, 2011).

The program attempts to make offenders realize the road they took to self-destruction and documents the road to recovery (ATS, 2011). Counselors and sponsors are available for the offender to discuss any stressors that may cause them to relapse (ATS, 2011). Research shows that involvement in a 12-step program increases the abstinence from alcohol and drugs, while dealing with emotional conflicts that result in relapse (Laudet & White, 2008).

The State of Kansas is also in partnership with Mirrors Inc. to provide substance abuse counseling and rehabilitation for offenders that have been court-ordered as a condition of parole (Safe Healthy People in Strong Communities [SHPISC] 2011). Mirrors Inc. was established in 1972 and is an outpatient substance abuse treatment facility that provides rehabilitation services to addicted offenders [SHPISC] 2011). Mirror's Inc. provides community and residential re-entry services to offenders while on parole and use a variety of techniques specific to the offender's needs to treat the offender (SHPISC, 2011). One method used is the Cognitive Behavioral Therapy (CBT) which is used to treat a wide array of emotional problems including: depression, anxiety

and fear (SHPISC, 2011). These emotions if not confronted may cause the offender to relapse or use substances excessively (SHPISC, 2011). Research found post-treatment cognitive behavioral therapy (CBT) is essential in maintaining abstinence from substance abuse (Berking, Margraf, Wupperman, Hoffman & Junghanns, 2011).

In Sedgwick County after a second or subsequent conviction an offender may be ordered to confinement in a work release facility as a condition of the imposed sentence (K.S.A. 8-1567). The purpose of work release programs is to reduce jail overcrowding in a minimal care facility (K.S.A. 8-1567). While under confinement, offenders are required to maintain full-time employment, pay all debts including: restitution, fines and any other debt incurred as a result of their convictions. This ensures that offenders are adhering to the commitment of the court while being monitored for compliance.

Another method used to confine repeat or hardcore alcohol offenders in Sedgwick County, Kansas is house arrest. Pursuant to K.S.A. 8-1567 after a second or subsequent conviction an offender may be ordered to home confinement. While confined, offenders will be placed on an alcohol electronic monitoring device known as a SCRAMx (Alcohol Monitoring Systems Inc., 2011). SCRAMx is an acronym for Secure Continuous Remote Alcohol Monitoring. This device (Alcohol Monitoring Systems Inc. [AMSI], 2011) is widely used in courts throughout 48 states. This lightweight bracelet allows monitoring of the offender while measuring alcohol through the offender's perspiration (AMSI, 2011). This device is worn on the offender's leg to monitor the

offender at pre-determined intervals unbeknown to the offender (AMSI,2011). This ensures compliance and adherence to abstaining from alcohol (AMSI, 2011). In an evaluation of the SCRAM bracelet results showed that they were effective in reducing alcohol consumption especially in repeat or hardcore offenders while under supervision and post-supervision conditions (Flango & Cheesman, 2009).

The purpose of this research was to determine which variables and offender attributes were factors for predicting which outcome group an offender would fall after the completion of the mandated sentence imposed. The 3 outcome groups were: successfully completers, technical violators and new charges group. This study also examines the differences of each group. This study will address the following four research questions:

1. Are there any age or gender differences between offenders that complete DUI/drug court requirements, offenders who violate on technicalities or offenders that commit new charges?
2. Does the amount of time in jail effect the success rate of habitual DUI offenders?
3. Do offender attributes or variables have an effect on group placement?
4. Are offenders' completing the DUI court program successfully at a higher or lower rate than offenders' who violate on technicalities or commit new charges?

## **Chapter 2**

### **Literature Review**

There are several theories that can be used to explain the phenomenon of people that choose to drive under the influence of alcohol [DUI], but for the purposes of this study we will focus on three main theories: the classical, rational and life course theories. First, the classical theory was developed during the 1700's in the Classical School of Criminology by an Italian criminologist and philosopher named Cesare Beccaria (Siegel, 2006). Beccaria believed that people are free-willed individuals that make the rational choice to commit crime (Siegel, 2006). This theory lends support to the second theory that gives causation to the problem that offenders have in choosing to drive under the influence of alcohol, and that is the rational choice theory.

The rational choice theory, developed by Jeremy Bentham, builds on the idea of the classical theory that people choose to commit deviant acts (Siegel, 2006). Bentham believed that people weigh the cost of apprehension that is associated with the pleasure of the deviant act in which they choose to partake (Siegel, 2006). Bentham believed that in order to deter future acts of deviance by non-criminals is to make sure that the law is applied in a swift, severe, but only proportional to the crime committed and to provide certainty that the offender will be caught (Siegel, 2006). Legislators began enacting laws that would inflict pain on the offender by incapacitating them and then providing incentives for compliance to the court ordered requirement by offering reduction in sentences (Siegel, 2006).



The third theory is the Life Course theory that states as people grow older they tend to “age out” of crime (Siegel, 2006). The life course theorist believes that as people transition from childhood into adulthood they conform to societal laws (Siegel, 2006). If the childhood environment and experience is negative, then the child is more likely to partake in criminality as an adult (Siegel, 2006). However, if the child has positive social influences, then the child is more likely to refrain from criminality or deviant acts (Siegel, 2006).

### **Classical and Rational Choice Theory**

The classical theory maintains people have the free will to make choices to commit crime and when the benefit of the crime outweighs the cost of punishment, then crime occurs (Siegel, 2006). The classical theory also maintains that people weigh pain vs. pleasure before committing deviant acts (Siegel, 2006). This theory when applied to drunk drivers implies that offenders have a choice to drive after consuming alcohol and increasing their blood alcohol content (BAC) level and that people have the free will of consuming excessive amounts of alcohol that renders them impaired. The theory further implies that people are benefiting from the pleasure they experience from drinking but do not consider the cost that is associated with being caught.

The classical theory shaped many views and set the standard in which to hold the offender accountable for their ability to choose right from wrong (Gottfredson, Hirschi, 1990). By enacting laws and defining crimes, legislatures set the foundation for what is considered to be acceptable and unacceptable behavior in society. Behavior that defies the social contract of society is considered deviant and in most cases illegal. For centuries, grass root organizations,

theorist and legislators have tried to gain insight into the perpetrator and explanations into the cause of antisocial behavior.

With the understanding that individuals are free-will people that are responsible for the deviant behavior they display, Jeremy Bentham developed the rational choice theory. This theory examines the sanctions that govern behavior (Gottfredson, Hirschi, 1990). Bentham pointed out that pain vs. pleasure seem to be motivators to conform behavior (Gottfredson, Hirschi, 1990). Bentham (Siegel, 2006) notes four main sanctions that conform or exerts self- control in others. The four sanctions are religion, moral, political and physical (Siegel, 2006). Religion sanctions according to Bentham were restrictions on deviant behavior due to belief in God (Siegel, 2006)

This behavior was thought to be self-controlled and without political intervention causing conformity (Siegel, 2006). This form of sanction is self-inflicted and the people that exhibit this form of self-control do so because they feel that deviant behavior is sinful and immoral and defy social order (Siegel, 2006). The second sanction that governs or conforms behavior is morality, this

behavior is also considered self-controlled and without intervention from political institutions sanction (Gottfredson, Hirschi, 1990). The people that exhibit this form of behavior do so because they are socially connected or bonded with the community in which they live. They do not wish to have people view them in a negative or condescending way (Siegel, 2006). The third sanction (Gottfredson, Hirschi, 1990) that governs behavior is political. Political sanctions refer to laws, policies and any doctrines that govern a body of people in an attempt to conform or set standards for acceptable and unacceptable behavior. The fourth sanction is physical restraints that are caused by the difficulty of committing the crime itself; therefore deterring them from future acts of deviance (Siegel, 2006). This form of sanction is built with the structure of the deviant act. For instance, like committing a robbery and encountering the victim during the attempted burglary, this may be unexpected and deter the criminal from repeating this type of crime due to the difficulties that were encountered (Siegel, 2006).

### **Life Course Theory**

In studying the different pathways adolescents choose to take to criminality, Rolf Loeber and Mark Leblanc found that adolescents take one of three pathways to conformity (Siegel, 2007). The first pathway is the authority conflict pathway which begins early with defiance against authoritative figures, such as teachers and parents (Siegel, 2006). The second pathway Loeber and Leblanc noted was the covert pathway. This pathway begins by committing petty and minor offenses, then later escalates

into more serious offenses (Siegel, 2006). The final pathway is the overt pathway. This pathway starts out aggressively and continues to escalate into physical aggression (Siegel, 2006). Any of the three pathways leads to sustained deviance and defiance against authority even into adulthood (Siegel, 2006). Siegel reports that males and females that experience antisocial behavior are more likely to persist through adulthood, increasing their propensity to commit more serious offenses (Siegel, 2006). Unless there are positive interventions or positive life changing events, then antisocial behavior leads to criminality (Siegel, 2006).

### **What are DUI Pilot and Drug Courts?**

Sedgwick County, Kansas has implemented a DUI/ drug court that imposes incapacitation and rehabilitation sanctions in an effort to address the specific needs of the offender while deterring future deviant acts of driving under the influence of alcohol (Boccheri, 2008). A drug court is a special court “that provides long-term treatment, counseling, sanctions, incentives and frequent court appearances” to substance abusing offenders (United States Department of Justice, 1997). In 1989 Dade County, Florida established the first drug court as a measurement to reduce the drug case overload while shifting the financial liability from the taxpayers to the offender. The primary goal of a drug court is to reduce recidivism, treat substance abuse, and rehabilitate the offender (Wilson, Mitchell, MacKenzie, 2006). Judges are able to monitor the offender and hold the offender accountable for their actions (United States Department of Justice, 1997). Some incentives of the drug court vs. a traditional court are that

the offender may have a dismissal of the charges, reduced or set aside sentences or even lesser penalties (The United States Department of Justice, 1997). There are 3 phases of the drug court: stabilization phase, intensive treatment phase and transition phase (United States Department of Justice, 1997). First, the stabilization phase focuses on detoxification, initial treatment assessment, education, and screening for other needs (United States Department of Justice, 1997). Second, the intensive treatment phase offers individual and group counseling and other core adjunctive therapies (United States Department of Justice, 1997). Third, the transition phase emphasizes social reintegration, employment, education and housing (United States Department of Justice, 1997).

### **Drug Court Model**

The United States Department of Justice sets and defines the criteria for developing a drug court. The DUI court is modeled after the drug court, the only difference is the offender profile and characteristics of the offender. According to the Drug Courts Program Office (United States Department of Justice, 1997) there are ten key components for developing a DUI/drug court.

- the first is integrating substance abuse treatment
- the second is using a non-combative approach
- the third is assessment of the offender
- the fourth is providing rehabilitation and treatment
- the fifth is to monitor the offender to ensure compliance
- the sixth is coordinate a strategy

- the seventh is ongoing interaction between the courts and offender
- the eighth is monitor and evaluate the program goals and measure the effectiveness
- the ninth is encourage education
- the tenth component is forging community and public based partnerships

### **Theory (why they work)**

The purpose of the DUI court is to treat the substance abuse problem (Bouffard, Richardson, 2007).The DUI pilot court program provides long-term, intensive treatment, monitoring of the offender and accountability in an effort to reduce the recidivism rate of DUI drivers (National Drug Court Professionals [NDCP], 2008). The benefits of establishing a DUI pilot program is that the DUI court team efficiently monitors the offender in an effort to reduce the negligent behavior of the offender (NDCP, 2008). The sentencing judge of the pilot court usually enters a deferred sentence of jail time until all requirements of the program are met (NDCP, 2008).

If the offender does not successfully attend meetings or pass random urine analysis then the judge can either impose the jail sentence or add more meetings or a longer commitment to the program (NDCP, 2008). In a 24-month evaluation of an experimental DUI court, it was found that the treatment group that was processed through the DUI court had a significantly less recidivism rate than the control that was processed through the traditional court process (Brekenridge, Winfree, Maupin & Clason, 2000).

## **Review of Kansas DUI Legislation:**

Kansas statute 8-1567 states;

Driving under influence of alcohol or drugs; blood alcohol concentration; penalties

(a) No person shall operate or attempt to operate any vehicle within this state while:

(1) The alcohol concentration in the person's blood or breath as shown by any competent evidence, including other competent evidence, as defined in paragraph (1) of subsection (f) of K.S.A. 8-1013, and amendments thereto, is .08 or more;

(2) the alcohol concentration in the person's blood or breath, as measured within two hours of the time of operating or attempting to operate a vehicle, is .08 or more;

(3) under the influence of alcohol to a degree that renders the person incapable of safely driving a vehicle;

(4) under the influence of any drug or combination of drugs to a degree that renders the person incapable of safely driving a vehicle; or

(5) under the influence of a combination of alcohol and any drug or drugs to a degree that renders the person incapable of safely driving a vehicle.

(b) No person shall operate or attempt to operate any vehicle within this state if the person is a habitual user of any narcotic, hypnotic, or stimulating drug.

**The Penalties for Violating K.S.A. 8-1567- Driving under the influence of alcohol or drugs:**

(f) (1) On the third conviction of a violation of this section, a person shall be guilty of a nonperson felony and sentenced to not less than 90 days nor more than one year's imprisonment and fined not less than \$1,500 nor more than \$2,500. The person convicted shall not be eligible for release on probation, suspension or reduction of sentence or parole until the person has served at least 90 days' imprisonment. The 90 days' imprisonment mandated by this paragraph may be served in a work release program only after such person has served 48 consecutive hours' imprisonment, provided such work release program requires such person to return to confinement at the end of each day in the work release program. The court may place the person convicted under a house arrest program pursuant to K.S.A. 21-4603b, and amendments thereto, to serve the remainder of the minimum sentence only after such person has served 48 consecutive hours' imprisonment.

(2) The court may order that the term of imprisonment imposed pursuant to paragraph (1) be served in a state facility in the custody of the secretary of corrections in a facility designated by the secretary for the provision of substance abuse treatment pursuant to the provisions of K.S.A. 21-4704, and amendments thereto. The person shall remain imprisoned at the state facility only while participating in the substance abuse treatment



program designated by the secretary and shall be returned to the custody of the sheriff for execution of the balance of the term of imprisonment upon completion of or the person's discharge from the substance abuse treatment program. Custody of the person shall be returned to the sheriff for execution of the sentence imposed in the event the secretary of corrections determines: (A) that substance abuse treatment resources or the capacity of the facility designated by the secretary for the incarceration and treatment of the person is not available; (B) the person fails to meaningfully participate in the treatment program of the designated facility; (C) the person is disruptive to the security or operation of the designated facility; or (D) the medical or mental health condition of the person renders the person unsuitable for confinement at the designated facility. The determination by the secretary that the person either is not to be admitted into the designated facility or is to be transferred from the designated facility is not subject to review. The sheriff shall be responsible for all transportation expenses to and from the state correctional facility.

The court shall also require as a condition of parole that such person enter into and complete a treatment program for alcohol and drug abuse as provided by K.S.A. 8-1008, and amendments thereto.

## **Chapter 3**

### **Methodology**

This section describes the research design that was used to conduct this study. It details and outlines the steps taken to ensure accuracy and validity in reporting this data. This study examined the variable differences of each participant in an effort to determine if age, gender, the number of convictions, number of continuances, the number of charges (in a single stop), the fine amount and the number of days in jail were factors for predicting which outcome group an offender would more likely fall into and this study examines the differences of each group. The following sections detail the population sampling process, the methods used, the variables and attributes collected, and the variables and attributes that were actually used for the purpose of this study.

#### **Sample Population**

The sampling technique used in this study was purposive sampling. A purposive sample is a non-probability method used to observe subsets of populations based on the researcher's prior knowledge about the participant's (Babbie, 2010). In selecting the participants the list of participants were narrowed down according to the participants that would be the most representative of that specific population as a whole. The participants selected for this study were based on the following criteria:

- must have been tried and convicted by the DUI/Drug court located in the 18th Judicial Court of Kansas between the dates of January 1, 2008 thru December 31, 2009
  - must have at least one prior drug **and** driving under the influence of alcohol or dui related conviction
- or
- must have 3 or more driving under the influence of alcohol convictions only
  - must have been exposed to at least 24 hours of jail and sentenced to mandatory probation as a condition of the sentence imposed

The purposive sampling technique was used in preparation for a multivariate–discriminant analysis. Because the DUI offenders fell exclusively into one of three groups, and because one of the objectives of the research was to describe factors that separate the groups, discriminant analysis (DA) was the selected analytic technique (Babbie, 2010). Discriminant analysis is a multivariate statistical procedure which allows the investigation of the differences between two or more groups in relationship to several variables simultaneously (Klecka, 1980). Discriminant analysis can be used for two purposes, prediction of group membership, and describing the way that groups differ (Huberty, Olejnk, 2006). In this study, the researcher was primarily interested in describing group differences.

In discriminant analysis as with other multivariate techniques the emphasis is upon analyzing the variables together rather than singly. In this way, the interaction of multiple variables can be considered. Discriminant analysis is useful when known and distinct groups exist (Greenberg, 1979; Marriott, 1974). The focus of discriminant analysis is upon groups that exist and the set of discriminator variables that explain the differences in the groups (Birzer, Craig-Moreland, 2008). Because this study makes use of discriminant analysis, it is quantitative in nature. Quantitative research measures vast amounts of information. According to Babbie, (2010) it is “the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect” (p. 527). The subjects of this study were unaware that they were participants in this study since the study was conducted post hoc. This study was conducted at the request of Maryane Khory, President of The DUI Victim Center of Kansas as a grant requirement by The Kansas Department of Transportation. The data that was collected by the DUI Victim Center of Kansas was incomplete and outdated, so with the help of interns and volunteers at the DUI Victim Center the information was updated and verified from the full court data base to ensure accuracy and validity.

The selected participants were between the ages of 19- 67 years old at the time of conviction. Among the 140 participants, 14.3% (N= 20) were female and 85.7% (N =120) were males. Ethnic distribution among participants was 74.3% (N = 104) were Caucasian, 16.4% (N =23) were African American, 7.9% (N=11) were Hispanic, .7% (N= 1) were American Indian and .7% (N= 1) was listed as other.

The data used in this study is secondary data and was extracted from the full court database in the Eighteenth Judicial Court of Sedgwick County, Kansas. The extraction process took approximately eight months to collect and verify. A docket that lists all cases being tried and sentenced in the 18<sup>th</sup> Judicial Court of Sedgwick County, Kansas is sent to the DUI Victim Center of Kansas by the District Attorney, Nola Foulston's office a week prior to sentencing. The court liaison at the DUI Victim Center of Kansas then sifts through the cases which appear on the docket and selects all of the felony dui or dui related cases and compiles them into a list. This compilation of cases became the list was used as the sampling population. The sampling population provided for this study consisted of 362 offenders and from that sample 140 cases were selected (see selection criteria above). The offenders were evaluated at 2 years post-conviction to determine if the offenders' had successfully completed the program, was violated on technicalities, or received new charges while under the commitment of the court.

The cases that were omitted from this purposive sampling method were as follows: offenders that died before completing the commitment of the court, cases that were amended and dropped to a lesser charge, offenders that are still in the program, cases that are missing one or more discriminant variable and cases that are incomplete and missing data. The offenders were assigned an identification number in lieu of their name to eliminate any possibilities of being identified. The independent variables that were extracted from the database on the offenders were: age, race, gender, days in jail, days in work release, days on house arrest, days in prison, whether or not the offenders had a retained vs. appointed defense attorney, date of violation, the

date the case was filed, the date the case was disposed of, the sentencing judge, number of convictions, the fine amount, the category of charges such as driving under the influence of alcohol, driving under the influence of alcohol related charges, drug related, drugs, traffic, property crimes, battery, and other. From this the following independent variables were used:

**Table 1: Variables and Attributes of the Sample Population**

<b>Variables</b>	<b>Attributes</b>
Age	Scale, 19 years-67 years old
Gender	Male, Female
Disposition	Successfully Completed, Violation Technicalities, New Charges
Number of Convictions	Scale, 0-12
Number of Days in Jail	Scale, 1-545
Race	Black, White, Hispanic, American Indian, Other
Number of Continuances	Scale, 0-16

\* In preparation for a discriminant analysis technique (see Results Section) the data was coded as follows: (see Table 2)

**Table 2: Coded Variables and Attributes of Sample Population**

<b>Variables</b>	<b>Codes</b>
Age	Scale, 19 years-67 years old
Gender	1- Male 2- Female
Disposition	2- Technicalities 3- New Charges 4- Successfully Completed
Number of Convictions	Scale, 0-12
Number of Days in Jail	Scale, 1-545
Race	1- White 2- Black 3- Hispanic 4- American Indian 5- Other
Number of Continuances	Scale, 0-16
Number of Charges (in a single stop)	Scale, 1-8

**Data Analysis:**

Univariate analysis only allows you to examine and measure the effects of one single variable in relationship to the dependent variable (Babbie, 2010). Bivariate analysis allows you to examine and measure the effects of two variables in relationship to the dependent variable (Babbie, 2010). For this study it was necessary to examine and measure many different variables in conjunction with the dependent variable in order to determine which variables would accurately classify each participant in one of the predictor outcome groups of successfully completed, new charges or technical violators group. This is called a multivariate analysis. Multivariate analysis can explain behavior or changes in a dependent variable by examining multiple discrete and continuous variables such as race, age, gender, previous convictions and job employment history. Multivariate designs can dispel any rumors or ideologies about a dependent variable by measuring multiple variables simultaneously (Babbie, 2010). In the 21<sup>st</sup> Century this type of analysis is becoming more popular in the social sciences field because it allows an in depth look at multiple factors to determine the cause of behavioral trends or relationships.

The data collected for this study was uploaded into SPSS, a statistical software package used in social sciences to examine relationships of variables at the continuous levels of ratio and interval. It also allows coding and examination of discrete variables such as nominal and ordinal for analyzing and determining relationships. The data for this study was examined at the continuous level.



## Chapter 4

### Results

#### Descriptive Statistics

This section includes the descriptive and independent variables utilized to perform three different multivariate discriminant analyses used in this study. Table 1 depicts the gender breakdown of the sample population (N= 140) that was used in this study, 85.7% (N=120) were male and 14.3% (N=20) were female.

**Table 3: Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	120	85.7	85.7	85.7
female	20	14.3	14.3	100.0
Total	140	100.0	100.0	

\*The age range for the participants in this study was 19- 67 years old.

#### Independent Variables

This section includes the independent variables utilized to conduct three different multivariate-discriminant analyses. The first analysis used the following seven variables: age, gender, number of days in jail, the fine amount, number of charges, number of

continuances and the number of convictions. The second analysis used only five variables which were: age, gender, number of days in jail, fine amount and the number of charges.

The third analysis used only three variables which were age, gender and number of days in jail. The purpose of this section is to present the results of the three multivariate-discriminant analyses that were used to conduct this study. Discriminant analysis is “a powerful multivariate statistical procedure which allows the investigation of the differences between two or more groups in relationship to several variables simultaneously” (Klecka, 1980, p.7). In discriminant analysis as with other multivariate techniques, the emphasis is upon analyzing the variables together rather than singly. In this way, the interaction of multiple variables can be considered. Discriminant analysis is useful when known and distinct groups exist (Birzer & Craig-Moreland, 2008; Greenberg, 1979; Marriott, 1974).

Discriminant analysis can be used either to describe the way groups differ or to predict membership in a group. In this study, discriminant analysis was used to evaluate a combination of variables that can be used to distinguish the three groups of habitual DUI offenders. One group contained offenders that violated probation due to technicalities. The second group of offenders committed new charges while under the commitment of the court. The third group of offenders had successfully completed the DUI pilot court program. The criteria that was used for judging whether it is possible to discriminate between the three different groups of offenders using variables related to gender, age, number of convictions, days in jail, number of charges, continuances and fine amount

was that the discriminant function produced by the analysis had to be describable using the structure coefficients with a value of .3 or greater. This criterion was necessary because the formula for discriminant analysis produces a discriminant function regardless of whether the function is meaningful. The structure matrix contains the coefficients which show the similarity between each individual variable and the overall discriminant function. If several of the variables do not have coefficient of at least .3, it is impossible to discern the meaning of the function. In analyses which use a large number of variables it is possible to get functions which have high predictive ability but which correlate with so many of the variables that it is impossible to decipher the meaning of the function. Therefore, this criterion places a logical restriction on the interpretation of the statistical output which requires that it must first have clarity in order to be used.

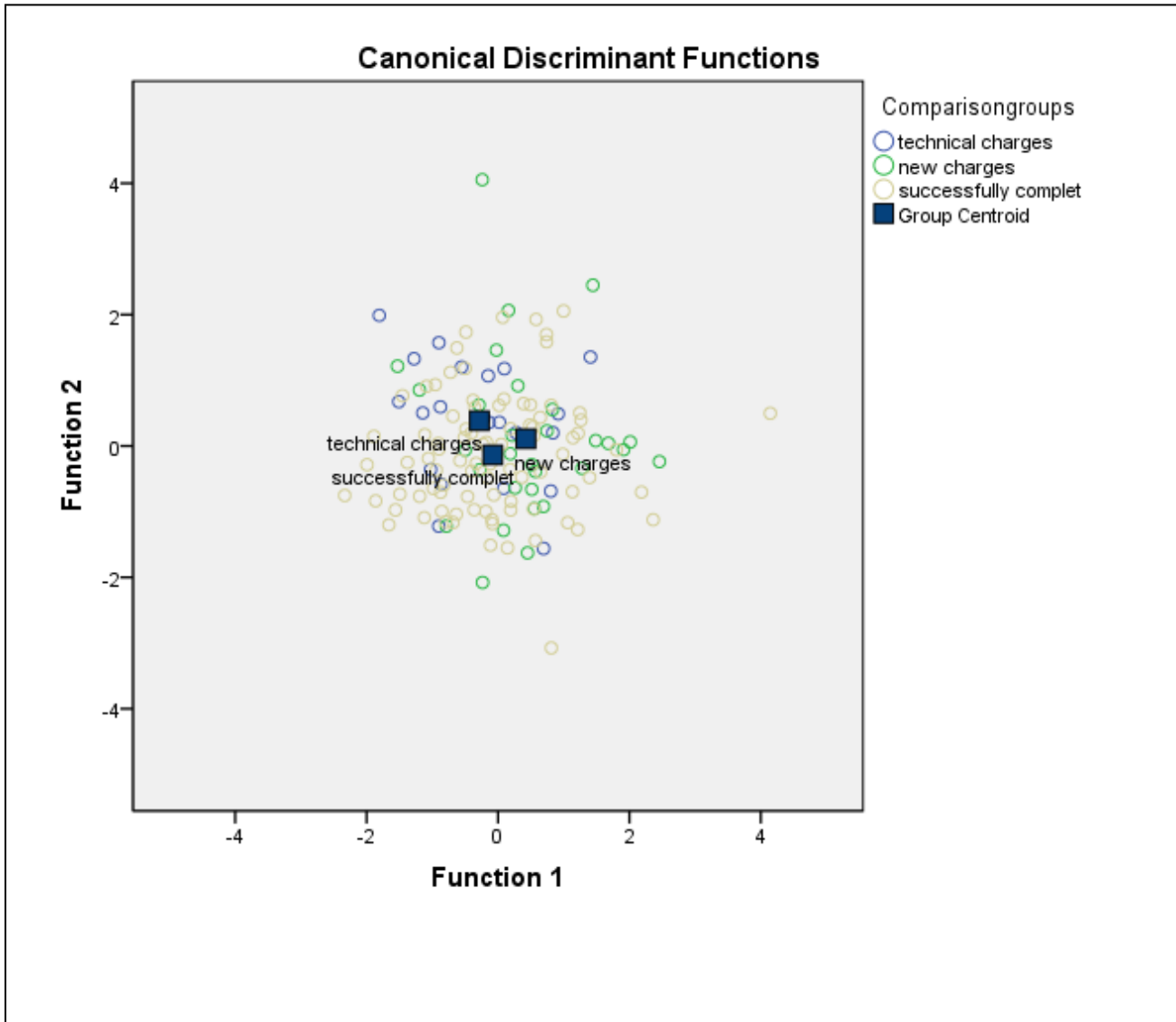
For purposes of the discriminant analysis, the participants were divided into the three groups: technical charges group, new charges group and successfully completed group. The set of discriminating variables used to predict placement in these groups consisted of age, gender, number of days spent in jail, fine amount, number of charges, continuances and number of convictions. For clarity, the number of charges refers to the charges that were given on a single stop incident. Also, the number of convictions refers to the number of DUI convictions on their public record. The analysis contained a total of seven separate variables: age, gender, number of convictions, number of continuances, number of days spent in jail, fine amount and number of charges.

The pooled-within group correlations are the correlations for the variables with the offenders placed in their groups of either technical charges, new charges and successfully completed. The pooled within- groups correlation matrix of discriminating variables was examined because interdependencies among variables is important in most multivariate analyses. That is, in order for multiple variables are indeed accounting for the same variance; a high correlation indicates that variables are accounting for the same variance. The within-groups matrix reveals how the discriminant function is related to the variables within each group in the analysis. The examination of the coefficients in this analysis showed that all coefficients were at a sufficiently weak level. Therefore, they were not strongly correlated. Standardized discriminant function coefficients are used to determine which variables contribute most to the discrimination between groups. By examining the standardized coefficients, the relative importance of each variable to the overall discriminant function can be determined. The standardized coefficients for this function which discriminated the three offending populations were as follows: age (-.594); gender (.412); number of days in jail (.319); fine amount (.608); number of charges (.497); continuances (-.264); and number of convictions (-.110). Overall, 62.9 percent of the originality grouped cases were classified correctly. In other words, the discriminating function classified participants correctly in 62% of the cases by using only seven discriminating variables.

**Table 4: Discriminant Function Coefficients and Structure Coefficients: Using 7 Variables**

Function 1 Variable	Standardized Coefficient	Structure Coefficient ( $r_s$ )	$R^2_s$
Age	-.594	-.523	<u>27.35%</u>
Gender	.412	.368	<u>13.54%</u>
Number of days in Jail	.319	.310	<u>9.61%</u>
Fine amount	.608	.323	<u>10.43%</u>
Number of charges	.497	.424	<u>17.98%</u>
Continuances	-.264	-.142	<u>2.01%</u>
Number of convictions	-.110	.049	<u>0.24%</u>

The group centroid for the technical violations group -.283, the group centroid for the new charges group was .425 and the group centroid for the successfully completed group was -.080. Diagram 1 depicts the placement of the offenders applying the multivariate-discriminant technique that was used to classify them.



**Figure 1: Canonical Discriminant Functions: Using 7 Variables**

The structure matrix in Table 2 contains the coefficients which show the similarity between each individual variable and the total discriminate function. The variable with the highest coefficients have the strongest relationship to the discriminant function.

These coefficients are used to name the discriminant function because they show how closely the variables and the overall discriminant function are related. In a study such as this in which the discriminant analysis is used for descriptive purposes, this is the most important information related to discriminant functions which satisfy the acceptance criteria. This elevated importance stems from the fact that interpreting the structure matrix results in naming the process that distinguishes the groups from each other. Since the overall purpose of discriminant analysis is to describe the phenomenon that discriminates the groups from each other, this logical process of giving meaning to the discriminant function by interpreting the structure matrix is central and critical to the whole process. In this interpreting process, variables with coefficients by approximately .3 and above are generally included in this interpretation. Five variables had sufficient coefficients to be included in the interpretation of the meaning of the discriminant function. They were as follows: gender (.368), age (-.523), the number of charges (.424), fine amount (.323) and number of days in jail (.310). The structure coefficients for all five variables carried weight in naming the discriminant function. Two of the seven variables had low coefficients of less than .3 each; therefore they were not used in the interpretation of the meaning of the discriminant function.

The variables of gender, age, number of charges, fine amount and number of days in jail were salient when naming this discriminant function. When these variables are examined simultaneously, they have an impact on group placement of the offenders.

**Table 5: Group Statistics**

Comparison Groups		Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
Technical Charges	# of Charges	2.0909	.75018	22	22.000
	Continuances	4.9091	2.97464	22	22.000
	# OF CONVICTIONS	3.8182	1.25874	22	22.000
	Raw age	41.4545	9.48546	22	22.000
	SEX	1.0909	.29424	22	22.000
	Jail	58.8182	113.05525	22	22.000
	Fine Amt	1904.5455	601.96288	22	22.000
New Charges	# of charges	2.4839	.99569	31	31.000
	Continuances	4.0968	3.18700	31	31.000
	# OF CONVICTIONS	3.9355	1.54780	31	31.000
	Raw age	38.0000	12.39624	31	31.000
	SEX	1.1935	.40161	31	31.000
	Jail	68.2258	132.81032	31	31.000
	Fine Amt	2032.2581	531.27965	31	31.000
Successfully Completed	# of charges	2.3103	1.18430	87	87.000
	Continuances	3.8276	2.68158	87	87.000
	# OF CONVICTIONS	3.9540	1.62758	87	87.000
	Raw age	41.6552	11.35047	87	87.000
	SEX	1.1379	.34683	87	87.000
	Jail	39.1264	92.85645	87	87.000
	Fine Amt	1931.0345	601.22169	87	87.000
Total	# of charges	2.3143	1.08678	140	140.000
	Continuances	4.0571	2.85065	140	140.000
	# OF CONVICTIONS	3.9286	1.54846	140	140.000
	Raw age	40.8143	11.34646	140	140.000
	SEX	1.1429	.35118	140	140.000
	Jail	48.6643	105.97723	140	140.000
	Fine Amt	1949.2857	584.26569	140	140.000



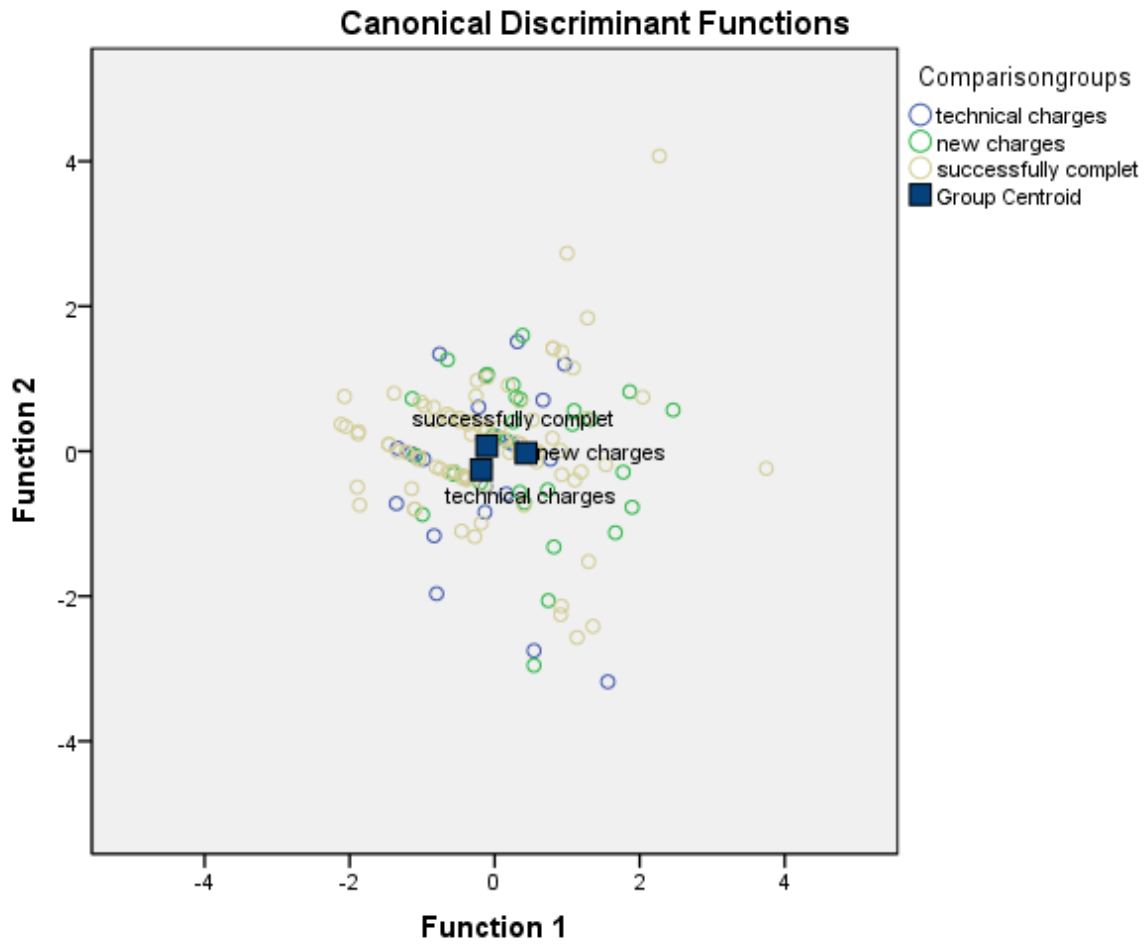
Table 4 indicates male offenders in their late-30's are picking up new charges for crimes committed while under the commitment of the court. The average age for the technical charges and successfully completed offenders was 41 years old. Table 4 also depicts that the average time spent in jail was significantly lower for successful completers than new charges or technical violations offenders. This suggest that the offenders that spent less time in jail and got into treatment faster were more likely to complete the program successfully. It also appears that the longer they spend in jail awaiting treatment; they will be more likely to commit new charges or be violated on technicalities. The data supports the fact that the more variables that are used to determine correlation's within subgroups of population, the higher you can correctly classify offenders in groups.

To test this theory, an analysis was performed on the sample population using fewer variables (see Table 6 & 7). In Table 6 only five variables were selected. The variables that were selected had the highest discriminant function coefficients (see Table 4). The variables used for this analysis were: age, gender, number of days in jail, fine amount and the number of charges. The standardized coefficients for this function which discriminated the three offending populations were as follows: age (-.679); gender (.385); number of days in jail (.377); fine amount (.531); number of charges (.410). Overall, 62.1 percent of the originality grouped cases were classified correctly. Meaning, the discriminating function classified participants correctly in 62% of the cases by using only five discriminating variables.

**Table 6: Discriminant Function Coefficients and Structure Coefficients: Using 5 Variables**

Function 1 Variable	Standardized Coefficient	Structure Coefficient ( $r_s$ )	$R^2_s$
Age	-.679	-.563	<u>31.70%</u>
Gender	.385	.352	<u>12.39%</u>
Number of days in Jail	.377	.330	<u>10.89%</u>
Fine amount	.531	.388	<u>15.05%</u>
Number of charges	.410	.391	<u>15.28%</u>

The group centroid for the technical violations group -.184, the group centroid for the new charges group was .433 and the group centroid for the successfully completed group was -108. See Diagram 2 for placement of offenders into one of the comparison groups of successfully completed, new charges or technical violators.



**Figure 2: Canonical Discriminant Functions: Using 5 Variables**

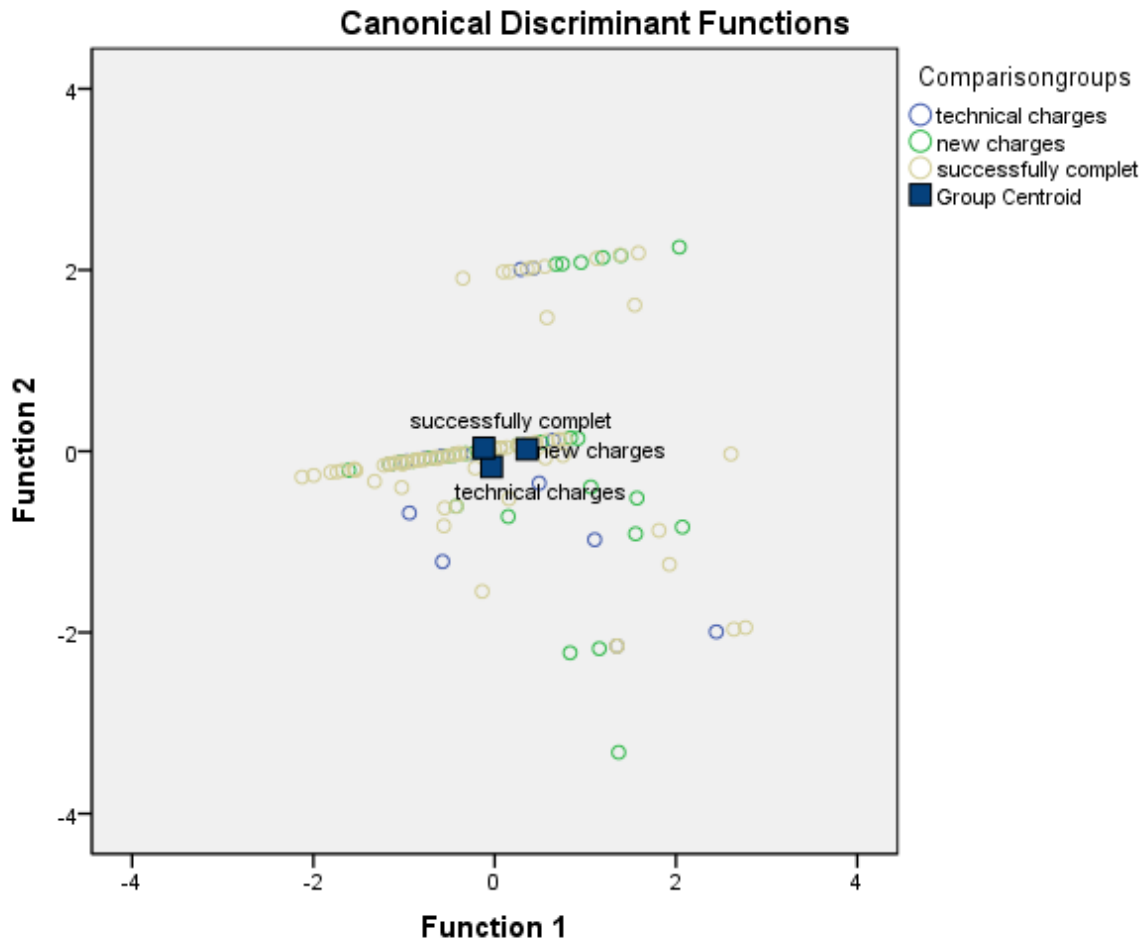
As you will see in Diagram 2, the comparison groups are cluttered together, this supports the fact that the more variables that are used to classify offenders the more separated the groups become.

Lastly, in Table 4 a third analysis was performed on the sample population using the three variables that strongly correlated and had the highest discriminant function coefficients. The selected variables used for this analysis were: age, fine amount and number of charges (in a single stop). The standardized coefficients for this function which discriminated the three offending populations were as follows: age (-.763); fine amount (.680) and the number of charges (in a single stop) (.518). The discriminating function classified participants correctly in 61.4% of the cases by using only three discriminating variables.

**Table 7: Discriminant Function Coefficients and Structure Coefficients: Using 3 Variables**

Function 1 Variable	Standardized Coefficient	Structure Coefficient ( $r_s$ )	$R^2_s$
Age	-.763	-.640	<u>41.00%</u>
Fine Amount	.680	.385	<u>30.59%</u>
Number of charges	.518	.482	<u>37.97%</u>

The group centroid for the technical violations group -.201, the group centroid for the new charges group was .366 and the group centroid for the successfully completed group was -.080.



**Figure 3: Canonical Discriminant Functions: Using 3 Variables**

It is important to note that in all three of the discriminant function analysis, it is not any one variable independently which explains group placement, but it is a constellation of variables. In this study, the variable of age, gender and number of charges (in a single stop) were salient in naming the discriminant function and thus explaining the placement of the offenders in one of the comparison groups.

## **Chapter 5**

### **Summary and Conclusion**

The purpose of this chapter is to summarize and consider the importance of the findings from the four research questions that were used to conduct this study. This chapter additionally considers the future implications and limitations of this study. In 1989 Dade County established the first drug court program in an effort to reduce the recidivism rate of drug offenders. Since then, over 35 states have implemented DUI/drug court programs that are modeled after the Dade County drug court (National Drug Court Professionals, 2010). The theory behind drug courts is to treat the substance abuse issue in an effort to reduce the likelihood of recidivism. The purpose of this research was to determine which variables and offender attributes were factors for predicting which outcome group an offender would fall in after the completion of the mandated sentence that was imposed by the DUI/drug court judge. This study can be used to influence policies and to direct judges to the most appropriate way of dealing with habitual DUI offenders' in an efficacious manner.

The implications from this study support the findings of other researchers who found that drug courts are effective at reducing the recidivism rate of drug users (Wilson, Mitchell & MacKenzie, 2006; Belenko, 2001). The problem is that very little literature existed about the effectiveness of these specialized courts in relation to alcohol dependent users. This study examined the effectiveness of the DUI/drug court in relation to substance users.

This study adds knowledge to the exiting literature about the effectiveness of specialized DUI/drug courts. This study utilized the statistical software program SPSS to interpret the data that was collected on each participant in this study. This study conducted a multivariate discriminant analysis to predict group membership of each offender. This study included a sample size of 140 participants (N= 120) 85.7% male, (N= 20) 14.3% female. This section discusses the findings of the four research questions used in this study:

**Q-1: Are there any age or gender differences between offenders that complete DUI/drug court requirements, offenders who violate on technicalities or offender's that commit new charges.**

The findings from this study indicate that there are no significant gender differences between the offenders that complete DUI/drug court requirements, offenders that violate on technicalities or offenders that commit new charges. However, this study reveals that males are entering the DUI court program at a much higher rate than women. For this study the sample population consisted of 362 offenders 88% (N=319) were male, 11% (N= 42) were female. From that sample population 140 cases were randomly selected resulting in 85.7% (N = 120) were male and 14.3% (N= 20) were female. This suggests that the rate of male versus females entering DUI court is disproportionate. The study also revealed that the average mean age for offenders violating on technicalities was 41 years old, the mean age for the offenders that received new charges while under the commitment of the court was 38 years old and the mean age for the offenders that successfully completed the requirements was 41 years old. This indicates that men in their late 30's are receiving new charges for crimes committed while under commitment of the

court. It also suggests that males in their early 40's though violating the terms of probation complete program requirements successfully at a much higher rate than the technical violators.

(See Table 1)

**Table 8: Comparison Groups, Gender, Mean Age and Number of Offenders**

<b>Comparison Group</b>	<b>Gender and Mean Age</b>	<b>Number of Offenders</b>
Technicalities	Male, 41 years old	22
New Charges	Male, 41 years old	31
Successfully Completed	Male, 38 years old	87

In a study conducted by American University it was found that 72% of the drug court participants were older males (Belenko, 2001; Tauber & Huddleston, 1999). In a similar study an evaluation of 12 jurisdictions in the New York area found that more than half of the participants that entered DUI/drug courts were male, in some jurisdictions as much as 85% (Rempel, Kralstein, Cissner, Cohen Labriola, Farole, Bader & Magnani, 2003).

**Q-2: Does the amount of time in jail have an effect on the success rate of habitual DUI offenders?**

The results of the study indicate that the number of days for the offenders who successfully completed the requirements of the court were significantly less than the technical violators and the offenders who received new charges. This suggests that the offenders' who spent less time in jail and more time in rehabilitation and treatment were more



likely to complete the program requirements successfully. This study also reveals that the technical violators and the offenders who received new charges spent more time in jail than the successfully completers group. (See Table 2)

**Table 9: Comparison Groups and Mean Number of Days in Jail**

Comparison Groups	Mean Number of Days in Jail
Technicalities	58 days
New Charges	68 days
Successfully Completed	39 days

**Q-3: Do offender’s attributes or variables have an effect on group placement?**

The findings from this study reveal that the more variables that were used, correctly predicted group placement of the offenders into one of the three comparison groups. An examination of the structure matrix revealed that age, gender, number of days in jail, fine amount and the number of charges (in a single stop) were important factors associated with group placement of offenders. This study showed that these variables were highly correlated with function 1. Such factors can play an important role in informing legislators and judges when

designing programs for greatest success of drug involved offenders. The structure matrix also revealed that the number of continuances and the number of convictions were not relevant in relation to predicting group placement of the offenders'. This would suggest that judges and legislators do not need to consider these variables as relevant factors for predicting group placement.

**Q-4: Are offenders' completing the DUI court program successfully at a higher or lower rate than offenders' who violate on technicalities or commit new charges?**

The findings from this study show that of the 140 offenders evaluated for this study, 22 violated on technicalities, 31 received new charges and 87 offenders successfully completed the program. This would suggest that though offenders are violating and committing new charges, more than half of the offenders in the DUI court are successfully completing the requirements of the program. The number of days spent in jail was less for the group that successfully completed the program.

**Table 10: Comparison Groups and Number of Offenders**

<b>Comparison Groups</b>	<b>Number of Offenders</b>
Technicalities	22
New Charges	31
Successfully Completed	87

## **Policy Implications:**

The findings of this study have policy implications for judge, legislator's and special interest groups. This study identified age, gender, the number of days in jail, fine amount and number of charges (in a single stop) as important attributes for predicting the outcome of an alcohol dependent offender. Persons interested in policies regarding DUI/drug courts, rehabilitation and treatment facilities and anyone interested in reducing the recidivism of offenders that drive under the influence of alcohol should be interested in the findings from this study.

Programs targeting young habitual offenders could be developed as a result of the findings from this study. Legislatures can crack down on establishments that serve liquor to individuals already intoxicated. Legislatures can mandate policies that require habitual DUI offenders to register with the county and online. Curfews could also be implemented for habitual drivers who drive under the influence of alcohol.

## **Limitations and Recommendations for Future Research:**

Though the study yielded significant findings however, this study had limitations. One of the limitations of this study was absence of the LSI-R scores. The absence of LSI-R scores limits our knowledge about the intensity of the addiction problem of the offender. LSI-R is an acronym for Level of Service Inventory Revised and a quantitative tool used to assess risk and needs of habitual offenders (Hollin, Palmer, 2006). The scores are calculated based on the offenders: criminal history, leisure/ recreation, attitudes,

emotional stability, companions, financial status, alcohol/ drug problems and accommodations. The scores are used to predict the likelihood of re-offending and the likelihood of successfully completing programs. The scores could explain risk associated with recidivism and the offenders' ability to refrain from criminality or deviant behavior. LSI-R scores would produce 10 more variables giving a total of 17 variables to be examined and considered. In a discriminant analysis the more variables correlating, the higher percent of classification of cases, and this could yield significant results. Further evidence of LSI-R scores in relation to other dependent variables are needed before the results of time spent time in jail is accepted as a causal relationship. For future research, LSI-R scores need to be further considered.

Another limitation of this study is the sample size. This study used a purposive sampling technique which requires some knowledge about the population on which the sample was drawn (Babbie, 2010). The sampling frame for this study was 362 offenders and of that 140 offenders were selected. This can lead to selection bias because everyone tried and convicted of driving under the influence of alcohol did not have an equal chance of being selected for participation in the study. In an effort to minimize this potential problem, a probability sampling technique can be used. A probability sampling method ensures that everyone has equal chance of being selected and any differences among the participants are by chance (Babbie, 2010). For future research a random assignment can be used to eliminate bias.

The final limitations of this study were low eigenvalues. In a multi-discriminant, a factor analysis is used to determine trends among several variables. The factor analysis minimizes the common variance amongst variables (Babbie, 2010). In this study the seven variables used in Function 1 only accounted for 60.2% of the variance among the groups. The low eigenvalues indicate the proportion of variance which correlates between the variables is minimal. This limitation would be addressed by increasing the sample size and the amount of variables, which would increase the covariance of the groups relating to the discriminant function while strengthening the findings of the study.

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