A STUDY OF IMMEDIATE SANCTION EFFECTIVENESS TO REDUCE NEW CONVICTION POST-PROBATION

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAIʻI AT MĀNOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

SOCIAL WELFARE

MAY 2016

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Keywords: HOPE Probation, Substance Abuse, Recidivism, LSI-R

Abstract

The criminal justice system's attempt to reduce new conviction of drug using individuals, through incarceration, has increased the national prison population rate by 3.2% from 1.526 million in 2005 to 1.575 million in 2013; also, between 2001 and 2013, more than 50% of federal prisoners were convicted of drug charges (Rabinowitz & Lurigio, 2009; Carson, 2014). The average cost to incarcerate an individual in Hawai'i is about $44,895 annually (Lawrence, 2016). Nationally, in order to reduce the prison population and the associated costs, more individuals were placed into probation supervision. Research has shown that first and second time offenders who received probation supervision instead of prison terms were less likely to recidivate (Rabinowitz & Lurigio, 2009). However, according to Mauer (1999), as probation caseloads increased, individual supervision time declined, which caused drug using violations and non-compliant behaviors to increase. In order to increase probationers' compliance levels, the First Circuit Court in the county of Honolulu (O'ahu) incorporated a probation supervision model based on the theory of operant conditioning. The model included motivational interviewing techniques (to increase probationers' good behaviors) and incorporated immediate sanctions (to reprimand probationers' noncompliant behaviors). This study analyzes factors related to new convictions and it includes comparisons of supervision outcome of probationers who began 5-years of probation supervision between the periods of January 2007 through December 2007. Probationers' supervision outcomes and new convictions were examined until December 2014. The post-probation outcome of reducing new conviction was significantly effective when immediate sanction was employed as a supervision mechanism. This research may provide valuable information to the social work field to improve probationers' compliance, drug treatment outcomes, and to increase public safety through the reduction in drug related crime.

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Chapter 1

Crime and Substance Abuse Addiction

Illegal drugs and alcoholism are attributed to cause more than 100,000 deaths in a single year (NIDA, 2010). Drug addiction has negatively impacted the United States population with medical, economic, criminal and social problems. The National Institute on Drug Abuse (2010) reported that adults abusing drugs may have cognitive challenges with thinking, memory loss and attention reduction to ones' environment; they often have poor social and behavior skills, which results in poor work performances and personal relationships (NIDA, 2010). Parents abusing drugs may reside in a chaotic and stress-filled home, which could lead to the abuse and neglect of their children. The well-being and development of children in such an environment may be compromised, which could form and create a cycle of future drug-abusing parents (Johnson & Leff, 1999).

Drug abuse comes in many forms; however, in particular the illicit drug methamphetamine has been one of the most abused and addictive drugs in the United States. Methamphetamine addiction has the potential of negatively impacting an individual with numerous undesirable outcomes. The negative short-term effects of individuals using methamphetamine in small doses could include insomnia, hyper-activity, and loss of appetite (NIDA, 2013). It is possible that high doses of methamphetamine may increase body temperatures to lethal levels, which could cause convulsions and strokes, while chronic abuse may cause psychotic and violent behavior characterized by intense paranoia, visual and auditory hallucinations, and out-of-control rages (NIDA, 2013). In addition, paranoia delusions have led to homicidal and/or suicidal thoughts in some circumstances (NIDA, 2013).

Methamphetamine had a toxic effect in animal studies where a single dose of the drug damaged nerve terminals in the dopamine regions of the brain (NIDA, 2006). The long-term effect of methamphetamine abuse may increase the chance of drug addiction due to functional and molecular changes in the brain leading to compulsive drug seeking (NIDA, 2006). Methamphetamine addiction may have long lasting brain structural impairments, causing thinking and motor skills deficits after years of sobriety (NIDA, 2010).

Methamphetamine Statistics: Nationally and in Hawai‘i

A growing body of literature shows that methamphetamine is psychologically addictive, which is caused through bingeing and high-intensive patterns of drug abuse; eventually, the drug users become paranoid and unpredictable. In a multisite study from 1999 to 2001, 80 percent of women reported experiencing abuse and violence from their male partner, who used the illicit substance (Cohen, 2003). Unlike the drug abusers in the 1960s and 1970s, today's drug users cross many ethnic and gender boundaries; this drug is readily available and has spread rapidly across the United States. Cities reported increased instances of violent crimes that were associated with methamphetamine use (Narconon Hawai‘i, 2010). Heavy methamphetamine use is attributed to an increase in violent behavior by a factor of 60% (McKetin et al., 2014).

Methamphetamine use is prevalent and has been associated with child abuse and domestic violence cases in Hawai‘i. As early as 2002, Hawai‘i First Circuit former prosecuting attorney and current judge Edward Kubo, Jr. reported that methamphetamine was linked to over 90 percent of the confirmed child abuse cases in Hawai‘i (Goodwin, 2004). Domestic violence disputes have intensified the dangers to law enforcement officers when arresting a chronic drug user, due to the perpetrator’s unpredictable behavior (Narconon Hawai‘i, 2010).

Chronic methamphetamine users are also involved in many motor vehicle violations and accidents during their phases of highs and withdrawals. The delusional state of the chronic users may heighten feelings of threat from moving shapes and shadows; they may increase their driving speed and display erratic driving patterns as they attempt to avoid the images. An additional threat from chronic users is the tendency to carry a loaded handgun for personal safety and they often conceal weapons in their automobiles and residences. To support their habit, chronic users may resort to spur-of-the-moment crimes like purse snatching, robberies, assaults, burglaries and thefts of motor vehicles (Narconon Hawai‘i, 2010).

Goodwin (2004) reported that approximately 90 percent of property crimes in Hawai‘i are drug-related and that many homicides, hostage situations and other violent crimes have been linked with methamphetamine abuse. Hawai‘i media reported assaults on police officers increased fivefold between 1998 and 2003, and that methamphetamine use was a major factor (Goodwin, 2004). Goodwin (2004) reported that the Hawai‘i government and communities spent nearly half a billion dollars per year on corrections, education, counseling and other related

programs to solve the methamphetamine problem. Goodwin (2004) estimated 30,000 methamphetamine users resided in Hawai‘i, who spent between $540 million to $1.8 billion annually, based on a $50 to $170 per day habit between 1998 and 2003.

Chapter 2

Criminal Justice System's Solution to Crime and Substance Abuse Addiction

At the dawn of the 21st century, America's response to higher drug related crimes was to arrest individuals possessing illicit drugs and to place them in prisons. Nationally in 2000, the federal government's drug enforcement policy to incarcerate drug offenders cost the federal and state governments approximately $38 billion (Rabinowitz & Lurigio, 2009). However, even with the massive expenditures, there is no empirical evidence to indicate that stricter drug laws and enforcement efforts reduce illegal drug use, drug sales and related drug crimes (Rabinowitz & Lurigio, 2009).

As a consequence of the federal "War on Drugs", approximately 750 out of 100,000 people were incarcerated, and the imprisonment rate of the United States exceeded many industrial countries by more than five times (Walmsley, 2006). The national prison population increased by 3.2% from 1.526 million in 2005 to 1.575 million in 2013; also, between 2001 and 2013, more than 50% of federal prisoners were convicted of drug charges (Rabinowitz & Lurigio, 2009; Carson, 2014). The nation's prison became filled with drug offending inmates, which was the primary cause for the increase (Tonry, 1995).

To taper the overcrowded prisons, more drug offenders were sentenced to probation because research has shown that first and second time offenders, who received probation supervision instead of prison terms, were less likely to recidivate (Rabinowitz & Lurigio, 2009). However, the probation population has been growing at the same rate as the prison population; with a shortage of funds to hire more probation officers, the caseloads have increased. Mauer (1999) stated the increased caseloads reduced probationers' supervision time, which caused drug use and noncompliant behaviors to increase.

In Hawai‘i, a costly alternative to probation is a 5-year prison term, which has an average annual cost of $44,895 per year for each inmate (Lawrence, 2016). Prison terms have been touted by some political leaders as a major deterrent to fight the war on drugs. However, prison has been less effective than probation and as the cost of prison increased, it has been syphoning off the Federal and the state's financial resources (Aukerman et al., 1994). Given the high cost

of incarcerating an individual and the sparse evidence of the effectiveness of prison sentences to reduce drug addiction, a more feasible and effective alternative to addressing drug abuse was necessary.

Chapter 3

The Theory Behind the Implementation of Immediate Sanctions

The model of immediate sanctions is based on the Theory of Operant Conditioning. Operant conditioning, to condition the behavior of animals and human subjects, has been thoroughly studied since Skinner's published research of "The Behavior of Organisms: An experimental analysis" (Skinner, 1938). A major portion of Skinner's study was dedicated toward the development of methods and terminology for the "scientific study of behavior" (Chiesa, 1992). His factual study of behavior was the result of observing behavioral responses of rats. Behavior was termed as either "respondent or operant," where respondent behavior was obtained through an "observable stimuli" (i.e., dog salivating at the sound of a ringing bell), which is known as classical conditioning (Skinner, 1938). However, in operant behavior, a "correlated stimulus" (a cue to trigger the subject to respond) was not detected when a behavior occurred. "Reflex reserve" is a process of building up a conditioned behavior, while "reflex strength" is the opposing extinguishing of a behavior. Behavior which is "controlled" by consequences is called "operant behavior" and operant conditioning is the study of reforming behavior that is maintained through reinforcement (Staddon & Cerutti, 2003).

Chiesa (1992) stated that there are three basic concepts to scientific study: cause, explanation, and theory. These three concepts are reviewed to determine the differences between "mechanistic and relational frameworks" and the behavioral relationships between the frameworks; the old age argument of nature compared to nurture respectively. The scientific community traditionally rejects mechanistic interpretations (i.e. behavior that is determined strictly by the interactions of the parts or factors by which they are composed). Radical behaviorism, which includes thoughts, emotions, and other internal mental factors, offers another viewpoint for traditional psychology; current studies show that radical behaviorism has gained much acceptance with the "new world view" supported by physicists and philosophers than contemporary psychology (Chiesa, 1992).

Operant Conditioning Counterview Points

The theory of operant conditioning, that learning is formulated through the occurrences of positive and negative consequences, has been a dominant psychological theory since Skinner's original work and that past experiments provided evidence that the "feedback

principles of early servomechanisms" (learning through past consequences) appeared to be a "plausible model" for the "law of effect" in both the behavioral and the cognitive theories (Gardnera & Gardnera, 1988). However, past research has provided evidence that outcomes of operant conditioning will appear inevitably, without a response-contingent consequence (Gardnera & Gardnera, 1988). Neuringer (2002) stated that operant behavior responses may be predictable, but sometimes the behaviors could appear as if they were irregular, unreliable, and volatile.

The following are two examples of how individuals' medical conditions could affect behavioral learning outcomes. Frank et al. (2004) stated that the neurotransmitter dopamine is a major determinant in reinforcing learning and an individual with Parkinson's disease with depleted dopamine levels has a weakened capacity of learning through the experimentation of positive or negative outcomes. If the Parkinson's patient ingests dopamine medication, the individual becomes responsive and learns new behavior through positive outcomes; however, the patient does not feel emotions from negative consequences and no learning takes place (Frank et al., 2004). Bejerot (1980) reported witnessing an elderly "nicotinist" patient, suffering from senile dementia, refusing to receive two packs of cigarettes from his relatives even though he smoked two packs a day for the past 60 years. When his relatives insisted that he was a smoker, the senile patient stated that they must be referring to another individual. The patient never requested another cigarette due to his memory lost; when the memory of the central nervous system pleasure center was eliminated, the nicotine dependence disappeared (Bejerot, 1980).

Baum (2012) stated that the idea of reinforcement (operant conditioning) is not complete and it is inaccurate; instead, another approach of understanding behavior could be established. If the idea of stimulus control was the result of learning, then the induction of a reward (food) and stimulus control would be identical, and the reward would appear to be a discriminative stimulus (a stimulus that a researcher would expect a corresponding behavior to occur); frequent occurrences would create a correlation between operant activity (e.g., lever pressing) and reward (e.g., food). However, a contingent event may inhibit behavior outcomes based on the design of a feedback stimulation experiment; an example that would explain higher response rates when ratio schedules are implemented (provide food after animal presses lever at a fixed amount of lever activation) compared to lower response rates for interval schedules (provide food after an

elapsed time of lever activation); many experiments include numerous operant activities due to outcomes of more frequent reward manifestations; pressing the lever (contingency) and the introduction of reward (food) provides the motivation for the repeated action and it is not a learned response, it is autoshaping (a form of classical conditioning) (Baum, 2012).

In an autoshaping experiment by Locurto et al. (1981), a conditional stimulus (CS) of a light was shown on a response key for 6 seconds and the pigeon was offered food, unconditional stimulus (US), no matter what the pigeon does. The event is repeated every minute and eventually, the pigeon would begin to peck on the response key when the CS appears. The authors called this autoshaping and it was first reported by Brown and Jenkins (1968); the development of autoshaping (classical conditioning) and evidence that it was not superstitious behavior (operant conditioning) were in opposition with most learning theorists (Locurto et al., 1981). The reason behind the autoshaping experiment was due to the fact that many operant behavior experiments used the technique to speed up the lever pressing behavior; if a pigeon was left alone in a cage without any outside coaching, it would take days or weeks before the pigeon pressed the lever for food and the operant behavior to develop (Locurto et al., 1981).

Gardnera & Gardnera (1988) favored the feedforward model due to advancements in computer science and the evolution in ethology. The feedforward model consolidates the learning theory of good and bad behaviors in the conditions of both the laboratory and the field. The researchers stated that this model is more "parsimonious and in line with the Darwinian principles of biological economy" (Gardnera & Gardnera, 1988, p. 429). Feedforward research has been shown to be practical in providing "well-fed children" and "cross-fostered chimpanzees" with learning and undertaking new demands towards free-living (Gardnera & Gardnera, 1988). An example of this is when Gardnera & Gardnera (1988) described their research outcomes between teaching chimpanzees the American Sign Language (ASL) through the utilization of the feedback (operant conditioning) and the their feedforward model. Chimpanzees that learned ASL through the feedback model learned to sign for basic necessities (food, water, etc.) and they could not converse freely with the researchers or other chimpanzees; instead, the signing became a begging mechanism. Chimpanzees that learned ASL in the feedforward model, where conversations between the chimpanzees and researches were conducted through an interactive learning experience, comparable to the interaction between

child and parent, the chimpanzees would converse freely with the researchers, as well as with other chimpanzees, without any anticipated rewards. The method was called feedforward due to the researchers' observation of chimpanzees teaching other chimpanzees how to converse using ASL.

The Strategy of Immediate Sanctions

Kleiman (2001) stated that impulsive individuals appear to have more crime-related arrests and convictions when compared to individuals who fit the model of "self-interested rationality" (self-control). Previous methods to improve the offenders' self-control relied on severe punishment (prison), rather than certain, but less severe punishment of immediate sanction (Kleiman, 2001). Operant conditioning appeared to be a viable theory to reconstruct behavior through the provision of positive reinforcement to increase desirable behavior outcomes and to apply punishment to extinguish undesirable behaviors.

For an impulsive individual, receiving a deferred and low-probability threat of a severe punishment is less effective than an immediate and high-probability sanction even when the immediate punishment is less severe (Kleiman, 2001). To enhance the offenders' adaptive functioning and to reduce their antisocial behavior outcomes, Kleiman (2001) believes that it is imperative to monitor an offender's behavior and to implement certain and immediate sanctions to address non-compliant behaviors. By deferring punishment, the offender's behavior may worsen and become repetitive, while failing to reward positive behaviors may decrease the likelihood of a positive behavior to reoccur (Marlowe, 2007). Addressing impulsive behavior seems to be inseparable from controlling street crime and the drug markets; the probation and parole systems are vital in managing drug-using offenders (Kleiman, 2001).

Policies that deal with offenders who use high-doses of potent drugs, such as cocaine, methamphetamine, and heroin, account for large sums of money being spent on crime prevention and drug use treatment (Kleiman, 2001). Therefore, frequent drug tests and predictable sanctions should be enforced with quick punishment, while abstinence of drug use should provide the offender with the reward of freedom. Drug treatment could be mandated only for repeated drug test failures in cases where sanctions alone may be insufficient; the benefits of drug tests, swift predictable sanctions, and drug treatment when necessary, could be more cost-effective for addressing drug addiction and crime (Kleiman, 2001).

Appropriate corrective action (level of punishment) of immediate sanctions created a more appropriate, effective, and individualized sentencing for a diverse offender population. The method has a profound outcome with drug and alcohol abusing offenders, who committed crimes of burglary, robbery, purse-snatching, theft and drug sales (Aukerman et al., 1994). Intermediate sanctions began to provide harsher punishment for offenders whose crimes did not require incarceration, but necessitated a deterrent to increase compliance. The objective was to provide a cost-effective supervision model to rehabilitate offenders, to increase public safety, and to provide an effective means for the probation and parole systems while effectively spending limited resources (Byrne et al., 1992).

Outcomes over the past decade have shown that attempts to encourage drug-using offenders to enter drug treatment through the threat of punishment have been insufficient. An alternative method of regular and random drug testing, combined with a swift and certain sanction for the offender's violations, might provide an effective method of reducing recidivism and improve (Hawkins, 2010). The outcome would be lower recidivism rates and improved offenders' compliance, thereby reducing the probability that individuals would end up in prison. Immediate sanctions, for instance three days in jail, provide a mild punishment threat to the offender, which may have a better deterrent outcome than the threat of issuing a severe punishment, such as 5 years in prison that is deferred and may not be imposed at all. A relatively mild, swift and consistent sanction may be more effective in changing the offender's behavior (Farrar-Owens, 2013). Some offenders may be able to cease drug use without drug treatment in order to avoid punishment. Therefore, instead of consuming valuable resources on a blanket approach of treating all drug using offenders, an individualized treatment plan may allow for the reallocation of resources to provide increased services for individuals requiring more intensive drug treatment services. Hawken (2010) proposed a behavioral triage model, which is a tiered level of drug treatment and it is based on the offender's drug addiction severity. There are three service tiers, severe level (residential treatment), moderate level (intensive outpatient treatment), and low level (group/individual classes). The behavioral triage model is proposed as a replacement for the traditional (blanket) drug assessment and treatment approach (Hawken, 2010).

Drug Court Program as an alternative solution.

Nationally, Drug Court Programs were created to address the problem of drug use while individuals were actively under probation supervision. The Drug Court treatment programs were part of the probation supervision branch, which were responsible for monitoring probationers' supervision, providing drug treatment, counseling, case management services, and the implementation of immediate sanctions. It was a systematic approach that included judges, prosecuting attorneys, defense attorneys, and the Drug Court treatment programs.

Early Drug Court Programs typically consisted of an average period of 11 months of supervision, compared to 6 months from an external drug treatment agency (Harrell, 1998). From September 1994 to January 1996, operational data from national drug court programs were collected; the data included frequent drug testing, immediate drug testing results, early drug use intervention, and judicial system involvement. Offenders in the control group (standard probation) were drug-tested twice a week, but there were no court compliance hearings, case management or special drug-treatment services (Harrell, 1998). Although the average cost per offender under Drug Court supervision was $4,500 more than the control group offenders, the Drug Court offenders were three times more likely to be drug-free when compared with the control group (Harrell, 1998). After 100 days of program completion, two percent of the Drug Court offenders were re-arrested as opposed to six percent from the control group; the research found significant results between the two groups. The researchers concluded that the Drug Court Programs were effective in reducing drug use and re-arrest rates; the researchers identified important characteristics of successful Drug Court programs (Harrell, 1998). Individuals on probation appear to make better decisions when predictable consequences are predetermined for non-compliant behaviors (Gendreau, 1996).

In 1996, the Hawai‘i Drug Court Program (HDCP) was created to allow drug users convicted of a crime to choose drug treatment through a special probation program. The incentive for participation was the possibility of finishing probation within two years compared to the typical five years. The method of treatment was based on operant conditioning and the program provided probationers copies of the workbook, titled "Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change, Pathways to Responsible Living: The Probationer's Workbook" (Wanberg & Milkman, 2006). The workbook explained

in detail the cognitive behavioral method of eliminating drug and alcohol use, and portions of the workbook carefully described the fundamental principle of operant conditioning. The HDCP also randomly administered urinalyses to test for illicit drug use; a negative drug test would reward the client with positive reinforcement of praise and freedom, while a positive drug test would have an immediate sanction of a short jail time. In 2006, the HDCP provided documented outcomes showing an 80 percent completion rate and a new conviction rate of 20 percent of those who graduated since 1996. This program has been praised as successful in Hawai'i's probation drug offenders when compared with the national statistics of a 38 percent reconviction rate from 2004 to 2010 (Rhodes et al., 2012).

The implementation of immediate sanctions and the creation of HOPE.

In 2004, Judge Steven Alm of the First Circuit Court in Hawai'i, expanded upon HDCP's success when he implemented the Hawai'i Opportunity Probation with Enforcement (HOPE) system. The program started with 33 probationers and by September 30, 2014, the HOPE program had expanded to 2,149 adult probationers. Drug offenders were referred to HOPE Probation based on a Level of Supervision - Revised (LSI-R) score of 21 and above and the offenders having an alcohol and drug problem history. The LSI-R is an assessment tool used by the Hawai'i Criminal Justice System, which includes the probation, parole and correctional systems. The LSI-R interview was conducted by a trained staff, usually a probation officer, and the interview utilized the motivational interviewing techniques to draw out as much pertinent data from offenders to complete the LSI-R score sheet. The LSI-R scores were recorded onto a database program called eZAssess by Cyzap, Inc. Appendix A displays a sample score sheet of the LSI-R assessment tool.

Level of Supervision Inventory - Revised (LSI-R) validity.

By 2005, the Level of Supervision Inventory – Revised (LSI-R) assessment instrument was perceived as a reliable and valid tool to evaluate criminogenic needs of offenders (Bonta, 1996; Bonta et al, 2001; Davidson, 2005). In 2004, more than 600 agencies associated with the criminal justice system in the United States adopted the LSI-R instrument (Lowenkamp & Latessa, 2004). In addition, the LSI-R is endorsed in England, Canada, New Zealand, and Australia (Bonta et al., 2001). By design, the higher the LSI-R scores, the risk of recidivism

increases; by lowering the scores through relevant level of services, the risk of recidivism decreases (Davidson, 2005).

Level of Supervision Inventory - Revised (LSI-R) scales and items.

The placement of probationers into HOPE probation in 2007 was based on the probationers' having a history of substance abuse problem and a Level of Supervision Inventory - Revised (LSI-R) score ranging from 21 to 53. The probationers placed in the standard probation may or may not have a substance abuse history and LSI-R scores could range from 0 to 53. Although there are 54 items listed on the LSI-R assessment score sheet, a selection of item 32 (a social isolate) would result in a zero score for item 34 (some criminal friends); therefore, a maximum score of 53 is possible.

The LSI-R consists of 10 scales: criminal history, education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitude/orientation. In this study presented here, the education and employment scale was separated into two scales for a total of 11 scales, to analyze the probationers' social and economic demographics. Of the LSI-R's 54 items, the following 11 items were chosen as independent variables: item 9 (probation or parole suspended), item 17 (suspended or expelled from school), item 28 (three or more address changes in a year), item 34 (some criminal friends), item 35 (few non-criminal acquaintances), item 37 (past alcohol problem), item 38 (past drug problem), item 39 (current alcohol problem), item 40 (current drug problem), item 41 (alcohol/drug law violation), and item 45 (other clinical indicators).

Item 9 and 11 addresses the difficulty a probationer has in an institutional setting and this study analyzed these items as factors relating to the probationer succeeding or failing probation supervision. Item 28 addresses homelessness as a factor for probation supervision success and failure due the difficulty of maintaining contact with the individual and the requirement for HOPE probationers to call the urinalysis hotline daily. Also homeless women were more influenced to consume alcohol and use drugs (Wenzel et al., 2009).

Item 34 and 35 Criminal friends and acquaintances are usually associated with illicit drug use and sales; also criminal friends tend to influence an individual's non-compliant behavior (Jones, 2006). Items 37, 38, 39, and 40 are alcohol and drug related problems that were detailed earlier in the literature review. For item 41, law violation history tends to be a good indicator of

future problems with the law, which increases the probationer's probability of failing probation supervision (Jones, 2006). Item 45 indicates that the probationer had a difficult time addressing the alcohol/drug problem or denied that a problem existed; therefore, the probability of failing probation supervision increases.

The application of HOPE probation.

Through a short interview process called a HOPE warning hearing, Judge Alm would decide if the drug offenders were willing to participate in the program. Because most of the drug offenders were willing to participate in the program to avoid a prison sentence, Judge Alm has accepted all willing probationers into the drug deterrent program. Following the national Drug Court *trend* of implementing immediate sanctions, HOPE probation was created for supervising substance-abusing probationers. HOPE provided a creative system for random drug testing, followed by a swift and certain, but relatively mild, sanction of a mandatory short jail-time. HOPE probationers were required to call a urinalysis (UA) hotline daily, and a recorded daily message determined if a UA was required. Based on the probationers' current LSI-R scores, a color-coded scheme determined the UA frequency of every week (color orange; scores 26+), to twice a month (color green; scores 22 to 25), and eventually once a month (color yellow, scores 20 to 21); as the probationer became successful in probation, the reassessed LSI-R score decreased and the individual was rewarded with less frequent UAs. However, if the probationer tested positive for drug use, the sheriffs would be immediately summoned and the probationer would be handcuffed and transported to jail. Jail time was determined by the frequency of the positive UA results and other non-compliant behaviors, which was based on a graduated sanction scale. The mandatory sanction of jail-time appeared to motivate the offender to become compliant while on probation (Hawken, 2010).

HOPE Supervision Effectiveness to Increase Probationers' Compliance

HOPE probation officers utilize motivational interviewing techniques during appointment sessions with probationers and immediate sanctions, which involve jail time for noncompliant behaviors. Motivational interviewing (MI) technique encourages a probationer to improve and succeed in supervision through the probation officer's skill in advocating for probationer's self-determination (providing goals and treatment choices); being client-centered focused; providing affirmations for good behaviors; being empathetic with probationer's needs; providing pros and

cons of decision making; and ensuring the probationer leaves the office in a better mental state than when they arrived. Noncompliant behaviors, which include positive drug tests; not reporting to probation appointments; and not following through with probation officers' instructions (e.g., finding employment, entering drug treatment, paying fines, etc.) incurs an immediate sanction (IS). The HOPE program uses MI and IS, which follow the theory of operant conditioning: where good behaviors are rewarded with affirmations (MI) and freedom (no jail time), to increase probationers' compliant behaviors, while noncompliant behaviors result in jail-time (IS) in an attempt to reduce probationers' negative behaviors.

HOPE mandates an abstinence from illicit drugs; although HOPE does not enforce drug treatment for every probationer, only the offenders who continue to test positive for illicit substances are required to enter a drug treatment program. This approach produces an efficient use of the Judiciary's resources, to accomplish its goals to reduce drug use, crime, and prison sentences in Hawai'i (Hawken & Kleiman, 2009).

Preliminary findings of HOPE probation.

A program evaluation was conducted of the HOPE Probation program in 2007 by Dr. Angela Hawken (2009). The study's sample size was 493 adult probationers, who were eligible for the HOPE Probation program, with eligibility criteria of a felony drug charge and 21 or above Level of Supervision Inventory (LSI-R) score. Hawken (2009) randomly selected two-thirds of the sample into the HOPE Probation program (N = 330) and one-third into standard probation (N = 163). The probation officers assigned to the selected HOPE sample informed the offenders of the mandatory participation into the program; the non-assigned offenders continued standard probation as usual.

In 2008, Hawken (2009) conducted a one year follow-up to compare the outcomes of HOPE compared to standard probation: the average outcome percentages of appointment no shows were: HOPE 9% compared to standard 23% (p<0.01), positive drug tests: HOPE 13% compared to standard 46% (p<0.01), new rearrests while in probation: HOPE 21% compared to standard 47% (p<0.01), probation revocations HOPE 7% compared to standard 15% (p<0.01), and days of incarceration: HOPE 138 days compared to standard 267 days (p<0.01). The study's finding indicated a successful program outcome during the one year follow-up study.

The randomized controlled trial of probationers assigned to the HOPE program had a statistically significant reduction in positive drug tests and missed probation appointments

compared to probationers assigned to standard supervision or a controlled condition (Hawken & Kleiman, 2009). HOPE probationers were significantly less likely to be arrested for a new crime at supervision follow-up periods of 3 months, 6 months, and 12 months; further analyses showed that although the probationers in HOPE had an increase in jail violations due to the stricter supervision, the number of days spent in jail was less than standard probation, due to HOPE's shorter jail periods (Hawken & Kleiman, 2009). HOPE probationers had approximately one-third the amount of days spent in prison when compared with probationers that were under standard supervision (Hawken & Kleiman, 2009). Although HOPE's immediate sanction terms, in regards to length of jail days, varied between multiple HOPE judges, the sanction variations began to diminish after a period of time as judges realized that subsequent probation violations were correlated with sanction terms (Hawken & Kleiman, 2009).

HOPE probation implements rewards for compliant behavior and punishment for non-compliant behavior, which is the core theory of Operant Conditioning. Hawken's research has shown that HOPE probation probationers increased compliant behaviors more than the standard probation probationers while in active probation (Hawken, 2009). According to the counterview points of Operant Conditioning, the HOPE probation model effectiveness could be in question since the model relies on behavior modification through the utilization of response-contingent consequences and Skinner (1938) stated that total extinction may not be possible.

Research Question

This study presented here analyzed the probation supervision outcomes in regards to the implementation of the Operant Conditioning model; the factors that may attribute to the individuals' successes or failures; and offensers' recidivism rates after the behavior modification stimulus of probation supervision no longer existed. As ten years have passed since the creation of HOPE Probation, conducting this study to analyze the factors that contribute to individuals' successes and failures in probation supervision and the recidivism rate outcomes could provide valuable data for the criminal justice system. The research question is:

What are the factors that promote long-term behavior changes to reduce new convictions post-probation? The proposed hypothesis is: Probation supervision with immediate sanctions would have a significant reduction in new convictions post-probation.

Chapter 4
Methods

Subjects

This study utilized a correlational design, which separately analyzed the factors related to new convictions for two distinct adult probation supervision groups: one based on the HOPE probation model and the other based on the standard probation model. For probationers placed into HOPE probation, the LSI-R scores were 21 and above; for standard probation the LSI-R scores were from zero and above. Because the LSI-R scores assess the probable risk levels of the probationers' likelihood of committing a new crime, the HOPE and standard groups would be skewed between low to high risk level probationers; therefore, due to the non-equivalent groups, each group was analyzed separately.

The Caseload Explorer (CE) database maintained by the Adult Client Services Branch (ACSB) determined if an adult participant (18 years and older) was currently in HOPE or standard probation. The probationers were drawn from the CE database to create two probation supervision groups: HOPE probation (N = 156) and standard probation (N = 314), from the supervision period beginning in the year 2007. Ethnicity or ages of probationers were not factors for group placement.

After creating the HOPE probation and standard probation groups, the Caseload Explorer (CE) database was used to ensure that probationers remained in their respective probation groups until supervision completion. Probationers whose probation supervision was terminated early due to non-compliance were counted as a probation failure. Probationers that were terminated from standard probation could have been resentenced to HOPE probation; however, any probationer reassigned from standard to HOPE probation was not be included in this study and only the probationer's initial probation group placement was included. All probationers who were terminated early as a reward for good behavior outcomes were included in this study and were counted as probation successes. Probationers who died while under probation supervision were not included in this study.

The probationer's Hawai'i State Identification (SID) number was used to match data of the First Circuit Court probationers with the conviction data from the Attorney General's office. Each probationer was assigned a code number to maintain each probationer's confidentiality.

Only the primary researcher had access to the SID numbers and after completion of the study, the list of SID numbers and matching code were destroyed; only aggregate statistical results are reported in this final report.

Study Design

The two probation groups were analyzed separately for new convictions that occurred in HOPE and standard post-probation from 2007 to 2014 by utilizing the Criminal Justice Information System (CJIS) database. The post-conviction data were drawn from the CJIS database after the probationers' end date. The CJIS database provided the data to analyze conviction outcomes at the post-probation supervision: date of conviction, type of offense (drug, property, violent and other), and the level of offense severity (petty misdemeanor, misdemeanor, felony class A, B, or C).

Independent variables.

The Caseload Explorer (CE) database provided the following variables to analyze the probability of an individual committing a new crime during and after probation supervision:

a) Age at start of probation supervision.
b) Ethnicity: 1 (White), 2 (Asian), 3 (Pacific Islander), 4 (Hawaiian), 5 (Other).
c) Gender: 0 (Male), 1 (Female).
d) Number of convictions at the start of supervision: discrete number (each conviction would score 1).
e) Length of supervision (number of months) on probation.
f) LSI-R total scores: range from 0 to 53 (If item 32 social isolate is scored, item 34 some criminal friends is not scored).
g) Criminal history scale: range 0 to 10 (score 1 each for LSI-R items 1 to 10).
h) Employment scale: range 0 to 7 (score 1 each for LSI-R items 11 to 14 and 18 to 20).
i) Education scale: range 0 to 3 (score 1 each for LSI-R items 15 to 17).
j) Financial scale: range 0 to 2 (score 1 each for LSI-R items 21 to 22).
k) Family/Marital scale: range 0 to 4 (score 1 each for LSI-R items 23 to 26).
l) Accommodation scale: range 0 to 3 (score 1 each for LSI-R items 27 to 29).
m) Leisure/Recreation scale: range 0 to 2 (score 1 each for LSI-R items 30 to 31).
n) Companions scale: range 0 to 4 (score 1 each for LSI-R items 32 to 36; except 32 or 34).

o) Alcohol/Drug problem scale: range 0 to 9 (score 1 each for LSI-R items 37 to 45).
p) Emotional/Personal scale: range 0 to 5 (score 1 each for LSI-R items 46 to 50).
q) Attitude/Orientation scale: range 0 to 4 (score 1 each for LSI-R items 51 to 54). Additionally, eleven LSI-R items were included separately from the scales above due to the literature reviews and the significant findings in the chi-square preliminary analyses phase between HOPE and standard probation. These eleven items provided more detailed analyses related to the successes and failures of probation supervision and the factors that predicted new convictions.
r) LSI-R item 9 probation or parole suspended
s) LSI-R item 17 suspended or expelled from school
t) LSI-R item 28 three or more address changes in a year
u) LSI-R item 34 some criminal friends
v) LSI-R item 35 few non-criminal acquaintances
w) LSI-R item 37 past alcohol problem
x) LSI-R item 38 past drug problem
y) LSI-R item 39 current alcohol problem
z) LSI-R item 40 current drug problem
aa) LSI-R item 41 alcohol/drug law violation
bb) LSI-R item 45 other clinical indicators
cc) The dependent variable succeed was also utilized as an independent variable in the regression analyses.

Dependent variables.

This study has multiple dependent variables that measures two major dependent variables that reported (a) the success or failure of probationers' supervision and (b) probationers' new convictions two years post-supervision. The HOPE probation outcome variable percentages of failure and success were reported separately from the standard probation outcome variable percentages. Successes are determined by the probationers completing supervision and the cases were allowed to expire in 2012, provided expirations were approved by the ACSB. Measures of success also included probationers receiving court judgments that allowed the cases to end early, prior to the expiration date. Failures were determined by the probationers receiving a

termination judgment from a judge, which ended the supervision period; termination might have involved jail sentences or a new term of probation supervision. However, a new term of probation supervision was not included in this study and it was scored as a failure outcome.

Other dependent variables of interest are probationers' conviction comparison at the start of supervision within the HOPE and standard probation models. The prior-conviction variables were measured by searching the CJIS database at the start date in 2007.

b) Prior-conviction amount: total amount of drug, property, violent and other crimes (the dependent variable amounts are total conviction counts for each probationer's crimes at probation sentencing).
c) Prior-conviction category: category of drug, property, violent and other crimes (the conviction category variable was recalculated into a single count for each offense).
d) Post-conviction amount: total amount of new drug, property, violent and other crimes (the dependent variable amounts are new conviction counts for each probationer's crimes post-probation).
e) Post-conviction category: category of new drug, property, violent and other crimes (the conviction category variable was recalculated into a single count for each new offense).
f) Any post-conviction: any new drug, property, violent and other crimes (the dependent variable was recalculated into a single count for all crimes that occurred post-probation).
g) Post-severity category: categories of new class B felony, class C felony, misdemeanor and petty misdemeanor offense severity (the dependent variable categories were recalculated into one count for each offense severity).
h) Post-weighted severity: the severity amount was recalculated into a weighted score by each probationer's severity count; weighted severity = [felony B amount x 4] + [felony C amount x 3] + [misdemeanor x 2] + [petty misdemeanor x 1].

The data obtained from CE and CJIS was analyzed using the Statistical Package for the Social Sciences (SPSS) Grad 23 statistics program (IBM, 2015). Multivariate logistic regression was used to analyze the binary dependent variable of success versus failure on probation and to analyze the binary dependent variables of any new conviction in any of the crime categories, such as drug, property, violent, and other crimes, as well as any new severity categories in class

B felony, class C felony, misdemeanors and petty misdemeanors. Multivariate linear regression was used to analyze the dependent variables in new conviction amount and new weighted severity amounts. Regression analyses of predictors of HOPE probation and standard probation were conducted separately. The analyses were used to determine the correlational strength between the independent variables of the probationers' probation successes and failures, as well as predictors of new convictions.

Multivariate analyses of variables were used to analyze and describe the sample groups in addition to identifying relationships between variables and multicollinearity.

For HOPE t-test analysis, variables were:

(a) LSI-R scales, (b) conviction data, (c) age

For Standard t-test analysis, variables were:

(a) LSI-R scales, (b) conviction data, (c) age

Chi-square analyses were included to analyze the independent variables' relationship with the dependent variable for supervision outcome of success or failure, and to determine if there were any significant differences between the levels of each independent variable (e.g., to analyze the association between gender, and the probationers' probation outcome in regards to successes and failures). Other chi-square analyses included: ethnicity, criminal history, education, employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitude/orientation. Results from the descriptive statistics, chi-square, t-tests, logistic and linear regression models were reported to determine differences and/or similarities between the two probation groups.

Chapter 5

Results

Comparison of the Immediate Sanction Model (HOPE) with the Standard Model

Independent variables for demographics were analyzed through the implementation of crosstab computations for gender and ethnicity; t-test was employed to analyze age as a continuous variable. The total sample size *N = 470,* consisted of 369 (78.5%) males and 101 (21.5%) females. Chi-square analyses of gender between HOPE probation (80.1%) males, (19.9%) females and standard probation (77.7%) males, (22.3%) females were not significant, χ^2 (1,470) = 0.362, p = 0.547 (Table 1).

Ethnicity was divided into five separate categories and recoded as: White 55 (11.7%), Asian 91 (19.4%), Hawaiian 208 (44.3%), Pacific Islander 42 (8.9%), and Others 74 (15.7%). (Appendix B: Recoding of Ethnic Group Categories, describes the recoding of the nineteen ethnic groups obtained from the CYZAP database, and based on frequency, the ethnic groups were assigned to five categories.) Chi-square analyses of ethnic category variances between HOPE probation White (14.1%), Asian (19.9%), Hawaiian (41.0%), Pacific Islander (10.3%), and Others (14.7%), and between standard probation White (10.5%), Asian (19.1%), Hawaiian (45.9%), Pacific Islander (8.3%), and Others (16.2%), were not significant, χ^2 (4,470) = 2.336, p = 0.674 (Table 1).

The age of the HOPE probationers ranged from 18 years to 72 years (M = 34.07; S.D. = 10.989) and standard probationers age ranged from 18 years to 65 years (M = 32.43; S.D. = 10.435). There was no significant difference detected between the ages of the probationers in HOPE or standard probation groups (p = 0.420).

The LSI-R total scores were provided by the CYZAP database and a comparison between the two groups was conducted (Table 2). Although HOPE probation required probationers to have a LSI-R total score of 21 and higher, 13 probationers' scores ranged from 6 to 20; however, all 13 individuals had a history of alcohol/drug use. The HOPE group scores ranged from 6 to 40 (M = 26.35; S.D. = 6.355) and probationers scores in the standard group ranged from 2 to 45 (M = 24.26; S.D. = 7.585). There were no significant differences detected between total LSI-R scores of the probationers in HOPE and standard probation (p = 0.087).

The LSI-R scales: criminal history, employment, education, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitudes/orientation were calculated and compared between HOPE and standard probation. Only the LSI-R employment scale and alcohol/drug scales were significant. The LSI-R employment scale (items 11 to 14 and 18 to 20) were computed and combined into a single score; the score could range between 0 to 7, and a high score would indicate a poor work history. The HOPE group scores ranged from 0 to 7 (M = 4.81; S.D. = 1.768) and probationers scores in the standard group ranged from 0 to 7 (M = 4.70; S.D. = 2.017). There was a significant difference between the LSI-R work history scores of the probationers in HOPE when compared with standard probation ($p < 0.05$). A likely *trend* hints at the possibility that a failure to obtain and maintain gainful employment increases the probability that an individual reverts to crime in order to obtain financial gain. Thereby, this *trend* could increase this study's conviction rate outcomes for HOPE probationers when compared with the standard probationers after supervision completion.

Table 1

Demographic comparison between HOPE and standard groups

	HOPE (N=156)	Standard (N=314)	Total (N=470)	χ^2(df)	p-value
Gender N(%)					
Male	125(80.1)	244 (77.7)	369(78.5)	.362(1)	0.547
Female	32(19.9)	70(22.3)	101(21.5)		
Ethnicity N(%)					
White	22(14.1)	33(10.5)	55(11.7)	2.336(4)	0.674
Asian	31(19.9)	60(19.1)	91(19.4)		
Hawaiian	64(41.0)	144(45.9)	208(44.3)		
Pac. Islander	16(10.3)	26(8.3)	42(8.9)		
Other	23(14.7)	51(16.2)	74(15.7)		
Age				t(df)	p-value
M(SD)	34.07(10.989)	32.43(10.435)		1.577(468)	0.42
Median[Mode]	32.7[34]	30.42[20]			
Min. [Max.]	18[72]	18[65]			

*p<.05

LSI-R alcohol/drug problem scale (items 37 to 45) was computed and combined into a single score; the score could range between 0 to 9, and a higher score would indicate a high alcohol/drug problem. The HOPE group scores ranged from 0 to 9 (M = 4.83; S.D. = 1.843) and probationers scores in the standard group ranged from 0 to 9 (M = 4.09; S.D. = 2.119). There was significant difference detected between the LSI-R alcohol/drug scale scores of the probationers in HOPE and standard probation ($p < 0.05$) (Table 2). A likely *trend* indicates an increased probability that an individual could relapse and revert to alcohol and drug use, and influence this study's probation supervision success or failure outcomes for HOPE probationers, when compared with the standard probationers.

Each LSI-R item (1 to 54) was analyzed individually and compared between HOPE and standard probation. Table 3, lists all the LSI-R items and highlights those items that were significant or showed a trend toward significance.

First, for LSI-R item 9 (any probation/parole suspended), the chi-square analysis between HOPE probation (56.4%) and standard probation (42.0%) was significant, χ^2 (1,470) = 8.646 ($p < 0.01$). LSI-R item 9 measures if an individual had a previous probation/parole suspension prior to the start of supervision in 2007. The chi-square indicated that HOPE probation had a higher percentage frequency of suspension than standard probation. This may indicate a likelihood that a probation violation and failure in HOPE probation could occur more frequently than standard probation in this study's outcome.

Table 2

LSI-R scale score comparison by HOPE and standard groups

LSI-R Scales	*N*	Mean	SD	*t*	df	*p*-value
Total LSI-R Score (1-54)						
HOPE	156	26.35	6.355	-2.965	465	.087
Standard	314	24.26	7.585			
Criminal History Scale (1-10)						
HOPE	156	4.53	2.416	-2.278	468	.714
Standard	314	4.00	2.391			
Employment (11-14) & (18-20)						
HOPE	156	4.81	1.768	-0.546	468	.029*
Standard	314	4.70	2.017			
Education (15-17)						
HOPE	156	1.43	1.235	-0.405	468	.088
Standard	314	1.38	1.170			
Financial (21-22)						
HOPE	156	1.21	0.742	-1.251	468	.336
Standard	314	1.11	0.737			
Family/Marital (23-26)						
HOPE	156	1.66	1.205	-1.600	468	.912
Standard	314	1.47	1.175			
Accommodation (27-29)						
HOPE	156	1.22	1.133	-2.090	468	.171
Standard	314	1.00	1.100			
Leisure/Recreation (30-31)						
HOPE	156	1.58	0.672	0.881	468	.253
Standard	314	1.63	0.652			
Companions (32-36)						
HOPE	156	2.85	1.359	-1.997	468	.663
Standard	314	2.58	1.340			
Alcohol/Drug Scale (37-45)						
HOPE	156	4.83	1.843	-3.707	468	.030*
Standard	314	4.09	2.119			
Emotional/Personal (46-50)						
HOPE	156	1.20	1.356	0.509	468	.416
Standard	314	1.27	1.393			
Attitude/Orientation (51-54)						
HOPE	156	1.40	1.323	-0.765	468	.664
Standard	314	1.30	1.365			

*$p<.05$

Table 3

LSI-R item comparison between HOPE and standard probation

LSI-R Items	HOPE (*N*=156)	Standard (*N*=314)	Total (*N*=470)	χ^2(df)	*p*-value
Criminal History *N*(%)					
1. Any prior conv	115(73.7)	214(68.2)	329(70.0)	1.537(1)	.215
2. Two or more conv	95(60.9)	177(56.4)	272(57.9)	.876(1)	.349
3. Three or more conv	81(51.9)	140(44.6)	221(47.0)	2.252(1)	.133
4. Three or more pres	43(27.6)	82(26.1)	125(26.6)	.112(1)	.738
5. Arrested <age 16	68(43.6)	122(38.9)	190(40.4)	.971(1)	.324
6. Ever incarcerated	90(57.7)	158(50.3)	248(52.8)	2.274(1)	.132
7. Escape history	9(5.8)	10(3.2)	19(4.0)	1.795(1)	.180
8. Ever punished	27(17.3)	49(15.6)	76(16.2)	.223(1)	.637
9. Prob/parol suspended	88(56.4)	132(42.0)	220(46.8)	8.646(1)	.003**
10. Assault/violence	91(58.3)	171(54.5)	262(55.7)	.634(1)	.426
Education/Employment *N*(%)					
11. Currently unempl	130(83.3)	243(77.4)	373(79.4)	2.249(1)	.134
12. Frequently unempl	130(83.3)	246(78.3)	376(80.0)	1.622(1)	.203
13. Never employed 1yr	58(37.2)	129(41.1)	187(39.8)	.663(1)	.416
14. Ever fired	48(30.8)	111(35.4)	159(33.8)	.977(1)	.323
15. <grade 10	35(22.4)	66(21.0)	101(21.5)	.124(1)	.725
16. <grade 12	84(53.8)	151(48.1)	235(50.0)	1.382(1)	.240
17. Suspended/expelled	55(35.3)	132(42.0)	187(39.8)	2.001(1)	.157
18. Participation/perf	128(82.1)	251(79.9)	379(80.6)	.299(1)	.585
19. Peer interactions	128(82.1)	248(79.0)	376(80.0)	.614(1)	.433
20. Authority interact	128(82.1)	248(79.0)	376(80.0)	.614(1)	.433
Financial *N*(%)					
21. Problems	116(74.4)	225(71.7)	341(72.6)	.382(1)	.536
22. Social Assistance	72(46.2)	125(39.8)	197(41.9)	1.723(1)	.189
Family/Marital *N*(%)					
23. Marital dissatisfy	45(28.8)	89(28.3)	134(28.5)	.013(1)	.910
24. Parental non-reward	79(50.6)	132(42.0)	211(44.9)	3.118(1)	.077
25. Other non-reward	55(35.3)	100(31.8)	155(33.0)	.548(1)	.459
26. Criminal family	80(51.3)	142(45.2)	222(47.2)	1.535(1)	.215

*p<.05 ; **p<.01

Table 3 (continued)
LSI-R item comparison between HOPE and standard probation

LSI-R Items	HOPE (*N*=156)	Standard (*N*=314)	Total (*N*=470)	χ^2(df)	*p*-value
Accommodation *N*(%)					
27. Unsatisfactory	61(39.1)	100(31.8)	161(34.3)	2.436(1)	.119
28. Three+ address chg	68(43.6)	101(32.2)	169(36.0)	5.907(1)	.015*
29. High crime neigh	62(39.7)	112(35.7)	174(37.0)	.742(1)	.389
Leisure *N*(%)					
30. No participation	125(80.1)	257(81.8)	382(81.3)	.202(1)	.653
31. Better use of time	121(77.6)	256(81.5)	377(80.2)	1.032(1)	.310
Companions *N*(%)					
32. Social isolate	3(1.9)	8(2.5)	11(2.3)	.178(1)	.673
33. Crim acquaintances	133(85.3)	268(85.4)	401(85.3)	.001(1)	.978
34. Crim friends	120(76.9)	215(68.5)	335(71.3)	3.636(1)	.057
35. Few non-crim acqu	92(59.0)	154(49.0)	246(52.3)	4.120(1)	.042*
36. Few non-crim friend	96(61.5)	166(52.9)	262(55.7)	3.177(1)	.075
Alcohol/Drug Problem *N*(%)					
37. Past alcohol problem	104(66.7)	179(57.0)	283(60.2)	4.060(1)	.044*
38. Past drug problem	144(92.3)	260(82.8)	404(86.0)	7.801(1)	.005**
39. Current alcohol prob	57(36.5)	93(29.6)	150(31.9)	2.297(1)	.130
40. Current drug prob	128(82.1)	215(68.5)	343(73.0)	9.747(1)	.002**
41. Law violation	123(78.8)	218(69.4)	341(72.6)	4.644(1)	.031*
42. Marital/family	84(53.8)	149(47.5)	233(49.6)	1.704(1)	.192
43. School/work	72(46.2)	119(37.9)	191(40.6)	2.945(1)	.086
44. Medical	11(7.1)	24(7.6)	35(7.4)	.053(1)	.818
45. Other clinical	30(19.2)	27(8.6)	57(12.1)	11.055(1)	.001***
Emotional/Personal *N*(%)					
46. Moderate interfere	82(52.6)	155(49.4)	237(50.4)	.427(1)	.513
47. Severe interference	4(2.6)	7(2.2)	11(2.3)	.051(1)	.821
48. Past MH tx	51(32.7)	126(40.1)	177(37.7)	2.454(1)	.117
49. Current MH tx	27(17.3)	56(17.8)	83(17.7)	.020(1)	.888
50. Psychological assess	23(14.7)	54(17.2)	77(16.4)	.458(1)	.499
Attitude/Orientation *N*(%)					
51. Supportive of crime	64(41.0)	124(39.5)	188(40.0)	.102(1)	.749
52. Poor att convention	77(49.4)	140(44.6)	217(46.2)	.955(1)	.328
53. Poor att sent/conv	29(18.6)	61(19.4)	90(19.1)	.047(1)	.828
54. Poor att supervision	48(30.8)	82(26.1)	130(27.7)	1.128(1)	.288

*p<.05 ; **p<.01; ***p<=.001

Second, for LSI-R item 28 (three or more address changes within a year), the chi-square analysis between HOPE probation (43.6%) and standard probation (32.2%) was significant, χ^2 (1,470) = 5.907, $p < 0.05$. LSI-R item 28 measures the likelihood that an individual was homeless prior to the 2007 starting period. The chi-square result indicates that HOPE probation had a higher percentage of homeless subjects (43.6%) compared with standard probation (32.2%). Homelessness creates a barrier for an individual's success because of failure to report for probation appointments, court hearings, agency meetings (the possibility of losing appointment information), and being unable to organize important tasks due to the lack of resources. Maintaining decent hygiene and wardrobe upkeep would be a daily challenge. Homelessness also exposes a probationer to high-risk individuals and environments where drug use and crime are prevalent. The likelihood of probation failure for the homeless in HOPE supervision increases due to the unavailability of telephone access to call the daily urinalysis hotline.

Third, for LSI-R item 34 (some criminal friends), the chi-square analysis between HOPE probation (76.9%) and standard probation (68.5%) was not significant, χ^2 (1,470) = 3.636, $p = .057$; however, a strong trend was indicated. LSI-R item 34 measures the likelihood that an individual has some criminal friends prior to the 2007 starting period. The strong trend indicates that HOPE probationers had a higher percentage of criminal friends when compared with standard probationers. Criminal friends are usually associated with illicit drug use and sales; also criminal friends tend to influence an individual's non-compliant behavior (Jones, 2006). The likelihood of a probation failure in HOPE supervision increases due to the increased criminal environmental influences.

Fourth, for LSI-R item 35 (few non-criminal acquaintances), the chi-square analysis between HOPE probation (59.0%) and standard probation (49.0%) was significant, χ^2 (1,470) = 4.120, $p < 0.05$. LSI-R item 35 is similar to LSI-R item 34 in that it measures the likelihood that an individual has few non-criminal acquaintances prior to the 2007 starting period. The analysis indicates that HOPE probationers had a higher percentage of few non-criminal acquaintances when compared with standard probationers. Few non-criminal acquaintances (or many criminal acquaintances) are usually associated with criminal activities; also these acquaintances tend to be neighbors, co-workers, individuals at high-risk hangouts, or ex-convicts. Like criminal friends,

such acquaintances tend to influence an individual's non-compliant behavior (Jones, 2006). The likelihood of probation failure in HOPE supervision increases due to the increased influence of a criminal environment.

Fifth, for LSI-R item 37 (past alcohol problem), the chi-square analysis between HOPE probation (66.7%) and standard probation (57.0%) was significant, χ^2 (1,470) = 4.060, $p < 0.05$. LSI-R item 37 indicates whether an individual had an alcohol problem prior to the 2007 starting period. The chi-square indicates that HOPE probationers had a higher percentage of past alcohol problems when compared with standard probationers. Past alcohol problems may pose a threat to an individual's success in probation, should alcohol consumption become a factor due to relapses.

Sixth, for LSI-R item 38 (past drug problem), the chi-square analysis between HOPE probation (92.3%) and standard probation (82.8%) was significant, χ^2 (1,470) = 7.801, $p < 0.01$. LSI-R item 37 indicates that an individual had a drug problem prior to the 2007 starting period. The finding indicates that HOPE probationers had a much higher percentage of past drug problems when compared with standard probationers, and only 12 individuals in HOPE probation did not self-report any drug use problems. Past drug problems may pose a serious threat to an individual's success in probation if drug relapse reoccurs. Should an individual have difficulty ceasing drug use while in probation supervision, a termination of supervision was a likely outcome.

Seventh, for LSI-R item 40 (current drug problem), the chi-square analysis between HOPE probation (82.1%) and standard probation (68.5%) was significant, χ^2 (1,470) = 9.747, $p < 0.01$. LSI-R item 40 indicates whether an individual had a drug problem (within the past 12 months) prior to the 2007 starting period. The chi-square indicates that HOPE probation had a much higher percentage of individuals with recent drug problems when compared with standard probation. Current and ongoing drug problem increases an individual's challenge to overcome drug addiction while also attempting to fulfill the requirements of probation supervision. The increased challenge of overcoming drug addiction threatens an individual's chances of a successful probation outcome.

Eighth, for LSI-R item 41 (recent alcohol/drug law problem), the chi-square analysis between HOPE probation (78.8%) and standard probation (69.4%) was significant, χ^2 (1,470) =

4.644, $p < 0.05$. LSI-R item 41 indicates that an individual had a recent alcohol/drug related law violation (within the past 12 months) prior to the 2007 starting period. The chi-square result indicates that HOPE probation had a much higher percentage of individuals with recent alcohol/drug law violations when compared with standard probation. A history of law violations tends to be a good indicator of future problems with the law, which increases the probationer's probability of failing probation supervision (Jones, 2006).

Ninth, for LSI-R item 45 (recent alcohol/drug clinical problem), the chi-square analysis between HOPE probation (19.2%) and standard probation (8.6%) was significant, χ^2 (1,470) = 11.055, $p = 0.001$. LSI-R item 45 indicates that an individual had a recent alcohol/drug problem related to clinical problems (within the past 12 months) prior to the 2007 starting period. The significant finding indicates that HOPE probation had a higher percentage of individuals with recent alcohol/drug clinical problems when compared with subjects in standard probation. Clinical problems indicate that an individual was having difficulty dealing with alcohol and/or drug addiction, demonstrating that ceasing substance use has been challenging. Clinical problems tend to be a good indicator of current or future alcohol/drug use problems, which increases the probationer's probability of failing probation supervision if substance use does not diminish.

Dependent Variable Results for Outcomes

Chi-square analyses were conducted on other dependent outcome variables to compare the success and failure outcomes of HOPE and standard probation. First, the proportion of probationers succeeding in HOPE probation (57.1%) and standard probation (22.6%) was statistically significant, χ^2 (1,470) = 55.054, $p = 0.001$ (Table 4). Although the HOPE probation subjects scored significantly higher in many items (i.e., probation/parole suspended, total work history, three or more address change, few non-criminal acquaintances, past alcohol problem, past drug problem, current drug problem, alcohol/drug law violation, alcohol/drug clinical problem, and the alcohol/drug scale), HOPE probationers successfully completed probation supervision at a significantly higher rate when compared with standard probation.

Table 4
Supervision outcome comparison between HOPE and standard groups

	HOPE (*N*=156)	Standard (*N*=314)	Total (*N*=470)	χ^2(df)	*p*-value
Succeed *N*(%)	89(57.1%)	71(22.6%)	160(34.0%)	55.054(1)	.000***
Early Term *N*(%)	11(7.1%)	6(1.9%)	17(3.6%)	7.900(1)	.005**

*p<.05; **p<.01; ***p<.001

Second, of the successful supervision outcome, some probationers were provided early termination from probation supervision for complying with the terms and conditions of probation. The early termination comparison between HOPE probation (7.1%) and standard probation (1.9%) was significantly higher, χ^2 (1,470) = 7.900, $p < 0.01$.

Third, the length of supervision comparison between the total succeeded group and failed group was significant ($p < 0.001$) (Table 5). All probationers were initially sentenced to a term of supervision of 60 months (5 years); a higher value than 60 months occurred if a successful probationer was provided the opportunity to improve supervision compliance. The length of supervision ranged from 1 month to 103 months (8.58 years). If the value was higher than 60 months and the probationer failed supervision, this would indicate that although the court system allowed the probationer to improve, the individual failed to do so. Another indicator of an increased length in supervision duration would be if a probationer absconded from probation supervision, and after the individual was apprehended, that individual may or may not have successfully completed probation supervision. Those individuals who continue to be on a bench warrant status (absconded from supervision), were not included in this study. The comparison of the length of supervision between the probationers in the total probation who succeeded ranged from 9 to 84 months (M = 58.56; S.D. = 9.528) and probationers who failed ranged from 1 to 103 months (M = 31.30; S.D. = 20.661), which was significant ($p < 0.001$). Comparison of the supervision length between HOPE probation succeeded and failed groups was significant ($p < 0.001$); the supervision length in the succeeded group ranged from 31 to 84 months

(M = 60.56; S.D. = 7.485) and for probationers who failed, the supervision length ranged from 2 to 87 months (M = 34.03; S.D = 24.735). Comparison of supervision length for the standard probation group who succeeded or failed was significant ($p < 0.001$); the length of supervision for the succeeded group ranged from 9 to 76 months (M = 56.04; S.D. = 11.146) and probationers in the failed group ranged from 1 to 103 months (M = 30.55; S.D. = 19.379). The HOPE and standard probation succeeded groups length of supervision mean scores were similar (60.56 months versus 56.04 months). The HOPE and standard probation failed groups length of supervision were similar (34.03 months versus 30.55 months).

Table 5

Comparison length of supervision by succeeded and failed groups

Length of supervision	*N*	Mean	SD	*t*	df	*p*-value
Total succeeded	160	58.56	9.528	-15.835	468	.000***
Total failed	310	31.30	20.661			
HOPE succeeded	89	60.56	7.489	-10.578	312	.000***
HOPE failed	67	34.03	24.735			
Standard succeeded	71	56.04	11.146	-10.578	312	.000***
Standard failed	243	30.55	19.379			

*p<.05; **p<.01; ***p<.001

Relationship of independent variables with probation supervision outcomes.

Chi-square analyses compared the independent variables between total probation successes and failures, HOPE probation successes and failures, and between standard probation successes and failures, after supervision completion. The comparisons of gender between total probation successes (32.8% male, 38.6% female) and failures (67.2% male, 61.4%) female were not significant, χ^2 (1,470) = 1.197, p = 0.274 (Table 6). The comparison for HOPE probation successes (53.6% male, 71.0% female) and failures (46.4% male, 29.0% female) were not significant, χ^2 (1,156) = 3.058, p = 0.080. The comparison for standard probation successes (22.1% male, 24.3% female) and failures (77.9% male, 75.7% female) were not significant, χ^2 (1,314) = 0.144, p = 0.704. Both males and females, however, followed a trend of being more successful in HOPE probation than standard probation.

Table 6

Demographic outcome comparison between succeeded and failed groups

	Succeeded (*N*=160)	Failed (*N*=310)	Total (*N*=470)	χ^2(df)	*p*-value
Gender *N*(%)					
Total probation *N*=470					
Male	121(32.8%)	248(67.2)	369(78.5)	1.197(1)	.274
Female	39(38.6)	62(61.4)	101(21.5)		
HOPE *N*=156					
Male	67(53.6)	58(46.4)	125(80.1)	3.058(1)	.080
Female	22(71.0)	9(29.0)	31(19.9)		
Standard *N*=314					
Male	54(22.1)	190(77.9)	244(77.7)	.144(1)	.704
Female	17(24.3)	53(75.7)	70(22.3)		
Ethnicity *N*(%)					
Total probation *N*=470					
White	17(30.9)	38(69.1)	55(11.7)	1.984(4)	.739
Asian	31(34.1)	60(65.9)	91(19.4)		
Hawaiian	71(34.1)	137(65.9)	208(44.3)		
Pacific Islander	18(42.9)	24(57.1)	42(8.9)		
Other	23(31.1)	51(68.9)	74(15.7)		
HOPE *N*=156					
White	8(36.4)	14(63.6)	22(14.1)	6.111(4)	.191
Asian	18(58.1)	13(41.9)	31(19.9)		
Hawaiian	37(57.8)	27(42.2)	64(41.0)		
Pacific Islander	12(75.0)	4(25.0)	16(10.3)		
Other	14(60.9)	9(39.1)	23(14.7)		
Standard *N*=314					
White	9(27.3)	24(72.7)	33(10.5)	1.244(4)	.871
Asian	13(21.7)	47(78.3)	60(19.1)		
Hawaiian	34(23.6)	110(76.4)	144(45.9)		
Pacific Islander	6(23.1)	20(76.9)	26(8.3)		
Other	9(17.6)	42(82.4)	51(16.2)		

*p<.05; **p<.01; ***p<.001

In Table 6, the comparison of ethnicity between total probation successes of White (30.9%), Asian (34.1%), Hawaiian (34.1%), Pacific Islander (42.9%), and Others (31.1%), and failures of White (69.1%), Asian (65.9%), Hawaiian (65.9%), Pacific Islander (57.1%), and Others (68.9%) were not significant, χ^2 (4,470) = 1.984, p = 0.739. The comparison for HOPE probationers' ethnicity who succeeded for White (36.4%), Asian (58.1%), Hawaiian (57.8%), Pacific Islander (75.0%), and Others (60.9%), and who failed for White (63.6%), Asian (41.9%), Hawaiian (42.2%), Pacific Islander (25.0%), and Others (39.1%) was not significant, χ^2 (4,156) = 6.111, p = 0.191. The ethnicity comparison for standard probation of successful White (27.3%), Asian (21.7%), Hawaiian (23.6%), Pacific Islander (23.1%), and Others (17.6%), and failures of White (72.7%), Asian (78.3%), Hawaiian (76.4%), Pacific Islander (76.9%), and Others (82.4%) was not significant, χ^2 (4,314) = 1.244, p = 0.871.

Therefore, all ethnic groups appeared to be evenly dispersed in the standard probation successful and failure groups. The White ethnic group, however, did not appear to do well in both the HOPE and standard supervision; the Pacific Islander and the Others ethnic groups appeared to be more successful in HOPE probation than standard probation. In HOPE probation, the Asian and Hawaiian ethnic groups had a slightly higher percentage of successes over failures.

The comparison of age between probation successes and failures was not significant (p = 0.815) (Table 7). The probationers in the success group's age ranged from 18 years to 60 (M = 34.02; S.D. = 10.528) years and probationers' ages in failure group ranged from 18 years to 72 years (M = 32.43; S.D. = 10.671). Comparison of the ages between HOPE probation successes and failures was not significant (p = 0.458); the ages in the success group age ranged from 18 years to 60 (M = 34.40; S.D. = 10.427) years and probationers' ages in failure group ranged from 18 years to 72 years (M = 33.62; S.D. = 11.760). Comparison of the ages between standard probation successes and failures was not significant (p = 0.958); the ages in the success group age ranged from 18 years to 56 years (M = 33.54; S.D. = 10.709) and probationers' ages in failure group ranged from 18 years to 65 years (M = 32.10; S.D. = 10.353).

Table 7

T-test outcome comparison between succeeded and failed groups

Age	*N*	Mean	SD	*t*	df	*p*-value
Total succeeded	160	34.02	10.528	-1.538	468	.815
Total failed	310	32.43	10.671			
HOPE succeeded	89	34.40	10.427	-0.438	154	.458
HOPE failed	67	33.62	11.760			
Standard succeeded	71	33.54	10.709	-1.023	312	.958
Standard failed	243	32.10	10.353			
LSI-R Total Score						
Total succeeded	160	25.68	6.293	-1.560	468	.009**
Total failed	310	24.58	7.695			
HOPE succeeded	89	25.80	5.968	-1.259	154	.071
HOPE failed	67	27.09	6.811			
Standard succeeded	71	25.54	6.718	-1.613	312	.175
Standard failed	243	23.89	7.793			
Financial Scale						
Total succeeded	160	1.22	0.774	-1.563	468	.008**
Total failed	310	1.11	0.718			
HOPE succeeded	89	1.18	0.791	0.490	154	.066
HOPE failed	67	1.24	0.676			
Standard succeeded	71	1.27	0.755	-1.998	312	.090
Standard failed	243	1.07	0.727			

*p<.05; **p<.01; ***p<.001

Each LSI-R item (1 to 54) was analyzed and compared individually between the successes and failures of total probation. The successes and failures of HOPE and standard probation were compared separately. The LSI-R scales for criminal history, education/ employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitudes/orientation were analyzed by succeeded and failed groups of total probation, HOPE and standard probation. Each LSI-R item (total 54) was analyzed by succeeded and failed groups and the group comparisons outcomes that were significant are described:

The LSI-R total scores of probation succeeded and failed was significant ($p < 0.01$) (Table 7); the probationers in the success group's LSI-R total scores ranged from 6 to 45 ($M = 25.68$; S.D. = 6.293) and probationers in failure group LSI-R total scores ranged from 2 to 42 ($M = 24.58$; S.D. = 7.695). Comparison of the LSI-R total scores between HOPE probation successes and failures was not significant ($p = 0.071$); the scores in the success group ranged from 6 to 38 ($M = 25.80$; S.D. = 5.968) and probationers' scores in failure group ranged from 11 to 40 ($M = 27.09$; S.D. = 6.811). Comparison of the LSI-R total scores between standard probation successes and failures was not significant ($p = 0.175$); the scores in the success group ranged from 15 to 45 ($M = 25.54$; S.D. = 6.718) and probationers' scores in failure group ranged from 2 to 42 ($M = 23.89$; S.D. = 7.793).

Although the t-test analyses within the HOPE and standard probation were not significant, an interesting comparison occurred between HOPE and standard probation. HOPE probationers with lower LSI-R total scores were more successful, while standard probationers with higher LSI-R total scores were more successful. This would suggest that LSI-R total scores may not be a good predictor of probation supervision outcomes at the start of supervision.

The comparison of probationers suspended/expelled from school for total probation successes (33.1%) and failures (43.2%) groups was significant χ^2 (1,470) = 4.494, $p < 0.05$ (Table 8). The comparison for HOPE probationers who were suspended/expelled from school in the succeeded group (28.1%) and failed group (44.8%) was significant χ^2 (1,156) = 4.663, $p < 0.05$. The comparison for standard probationers in the succeeded group (39.4%) and failed group (42.8%) was not significant. χ^2 (1,314) = 0.255, $p = 0.614$. The comparison of the standard probationers' succeeded group followed a similar association as the HOPE

probationers' succeeded group. Therefore, not being suspended or expelled from school made an impact on being successful in probation regardless of being placed in HOPE or standard probation.

Table 8

LSI-R item outcome comparison between succeeded and failed groups

	Succeeded (*N*=160)	Failed (*N*=310)	Total (*N*=470)	χ^2(df)	*p*-value
LSI-R item 17 (suspended/expelled)					
Total probation (160:310)	53(33.1)	134(43.2)	187(39.8)	4.494(1)	.034*
HOPE (89:67)	25(28.1)	30(44.8)	55(35.3)	4.663(1)	.031*
Standard (71:243)	28(39.4)	104(42.8)	132(42.0)	0.255(1)	.614
LSI-R item 22 (social assistance)					
Total probation (160:310)	76(47.5)	121(39.0)	197(41.9)	3.108(1)	.078
HOPE (89:67)	39(43.8)	33(49.3)	72(46.2)	0.454(1)	.500
Standard (71:243)	37(52.1)	88(36.2)	125(39.8)	5.796(1)	.016*
LSI-R item 38 (past drug problem)					
Total probation (160:310)	145(90.6)	259(83.5)	404(86.0)	4.378(1)	.036*
HOPE (89:67)	82(92.1)	62(92.5)	144(92.3)	0.009(1)	.926
Standard (71:243)	63(88.7)	197(81.1)	260(82.8)	2.265(1)	.132

*p<.05; **p<.01; ***p<.001

The comparison of probationers provided social assistance in the probation succeeded group (47.5%) and failed group (39.0%) was not significant χ^2 (1,470) = 3.108, p = 0.078 (Table 8). The comparison for HOPE probationers receiving social assistance in the succeeded group (43.8%) and failed group (56.2%) was not significant χ^2 (1,156) = 0.454, p = 0.500. The comparison for standard probationers receiving financial assistance who succeeded (52.1%) and failed (36.2%) was significant χ^2 (1,314) = 5.796, p < 0.05.

The LSI-R's financial scale ranged from 0 to 2, and a higher value indicates a greater need for financial assistance (Table 7). Probationers in the total probation who succeeded had financial scores M = 1.22, S.D. = 0.774 and group who failed had scores of M = 1.11, S.D. = 0.718; the financial scale comparison between the probationers of total probation succeeded

group and a failed group was significant ($p < 0.01$). A comparison of the LSI-R financial scale between HOPE probationers who succeeded and failed was not significant ($p = 0.066$); the score in the succeed group was $M = 1.18$, S.D. = 0.791 and probationers' failed group were $M = 1.24$, S.D. = 0.676. A comparison of the financial scale between standard probation succeeded and failed groups was not significant ($p = 0.090$); the mean score in the succeeded group ranged from $M = 1.27$, S.D. = 0.755 and probationers' scores in the failed group was $M = 1.07$, S.D. = 0.727.

The comparison of probationers with previous drug problems prior to the start of probation supervision the total probation succeeded group (90.6%) and failed group (83.5%) was significant χ^2 (1,470) = 4.378, $p < 0.05$ (Table 8). The comparison for HOPE probationers with previous drug problems in the succeeded group (92.1%) and failed group (92.5%) was not significant χ^2 (1,156) = 0.009, $p = 0.926$. The comparison for the standard probationers with previous drug problems in the succeeded group (88.7%) and failed group (81.1%) was not significant χ^2 (1,314) = 2.265, $p = 0.132$.

Comparison of group convictions prior to start of supervision.

As stated in the Operant Conditioning Theory chapter, long-term compliance of probation supervision utilizing immediate sanctions could be difficult to maintain after the completion of probation supervision. This study compares outcomes for the probationers in both HOPE and standard supervision groups to determine if HOPE probation and the practice of implementing immediate sanctions had an impact in reducing new convictions two years after completing supervision.

The following tables illustrate the total amount of prior crimes an individual was convicted of, and sentenced to, probation supervision; the numerical data is an inclusive amount of all offense counts. A probationer's single arrest could result in two or more counts of drug, property, violent and/or other crimes; t-tests were used to analyze the amount comparisons. Following the amount table, a category conviction table was included to collapse the total amount of counts that could have occurred in one conviction to show just one incident in one conviction. An arrest resulting in two or more counts of drug, property, violent and/or other convictions, would be recalculated and counted only once for each category; chi-square were used to analyze the category comparisons.

The comparison of the amount of prior drug convictions in total probation supervision between the succeeded group (M = 71.16; S.D. = 1.421) and the failed group (M = 0.88; S.D. = 1.126) was significant ($p < 0.01$) (Table 9). There was no significant difference between prior property conviction of succeeded (M = 0.74; S.D. = 1.209) and failed (M = 1.10; S.D. = 1.431) groups (p = 0.081). The amount of prior violent convictions in the succeeded group (M = 0.35; S.D. = 0.646) and failed group (M = 0.23; S.D. = 0.597) comparison was significant ($p < 0.05$) and the comparison of "prior other" convictions of succeeded (M = 0.11; S.D. = 0.336) and failed (M = 0.12; S.D. = 0.413) groups was not significant (p = 0.647).

Table 9
Total prior conviction amount comparison between succeeded and failed groups

Prior Drug	*N*	Mean	SD	*T*	df	*p*-value
Total Succeed	160	1.16	1.421	-2.267	468	.009**
Total Failed	310	0.88	1.126			
Prior Property						
Total Succeed	160	0.74	1.209	2.667	468	.101
Total Failed	310	1.10	1.431			
Prior Violent						
Total Succeed	160	0.35	0.646	-2.077	468	.001***
Total Failed	310	0.23	0.597			
Prior Other						
Total Succeed	160	0.11	0.336	0.181	468	.647
Total Failed	310	0.12	0.413			

*p<.05; **p<.01; ***p<=.001

Overall, there were more probationers with prior drug and violent convictions who were successful in probation supervision. Although not found to be significant, probationers with prior property convictions were less likely to succeed in probation, while probationers with "prior other" convictions were evenly distributed between succeeded and failed.

In the comparison for the category of prior convictions for drugs, the succeeded (59.9%) and failed (44.2%) group difference was not significant χ^2 (1,220) = 2.501, p = 0.114 (Table 10). There was a significant difference in prior property convictions between succeeded (47.5%) and

failed groups (60.3%), χ^2 (1,263) = 7.041, $p < 0.01$. Also significant was the comparison on prior violent convictions between succeeded (26.9%) and failed (17.4%) groups, χ^2 (1,97) = 5.761, $p < 0.05$. The comparison for "prior other" convictions between succeeded (10.6%) and failed groups (9.7%) was not significant, χ^2 (1,47) = 0.105, $p = 0.746$.

Table 10
Total prior conviction category comparison between succeeded and failed groups

	Total Probation Groups				
Category Count	Succeed	Failed	Total Row	χ^2(df)	*p*
Prior Drug	83 (51.9)	137 (44.2)	220(35.1)	2.501(1)	.114
Prior Property	76 (47.5)	187 (60.3)	263(41.9)	7.041(1)	.008**
Prior Violent	43 (26.9)	54 (17.4)	97(15.5)	5.761(1)	.016*
Prior Other	17 (10.6)	30 (9.7)	47(7.5)	.105(1)	.746
Total Column	219	408	627		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
*p<.05; **p<.01

Table 11
HOPE prior conviction amount comparison between succeeded and failed groups

Prior Drug	*N*	Mean	SD	*t*	df	*p*-value
HOPE Succeed	89	1.30	1.503	-1.880	154	.117
HOPE Failed	67	0.90	1.089			
Prior Property						
HOPE Succeed	89	0.71	1.089	1.529	154	.559
HOPE Failed	67	0.99	1.161			
Prior Violent						
HOPE Succeed	89	0.29	0.568	-0.627	154	.189
HOPE Failed	67	0.24	0.464			
Prior Other						
HOPE Succeed	89	0.13	0.375	-0.008	154	.996
HOPE Failed	67	0.13	0.385			

*p<.05; **p<.01

The comparison for the amount of drug convictions prior to HOPE probation supervision between the succeeded (M = 1.30; S.D. = 1.503) and failed (M = 0.90; S.D. = 1.089) groups was not significant (p = 0.117) (Table 11). The comparison of the amount of prior property convictions in HOPE was not significant in the succeeded (M = 0.71; S.D. = 1.089) and failed (M = 0.99; S.D. = 1.161) groups (p = 0.559). Also the comparison of the amount of prior violent convictions between HOPE succeeded (M = 0.29; S.D. = 0.568) and failed (M = 0.24; S.D. = 0.464) groups was not significant (p = 0.189). The final comparison of "prior other" convictions was not significant between HOPE succeeded (M = 0.13; S.D. = 0.375) and failed (M = 0.13; S.D. = 0.385) groups (p = 0.996).

Table 12
HOPE prior conviction category comparison between succeeded and failed groups

	HOPE Probation Groups				
Category Count	Succeed	Failed	Total Row	χ^2(df)	*p*
Prior Drug	51 (57.3%)	30 (44.8%)	81(37.2)	2.403(1)	.121
Prior Property	42 (47.2%)	39 (58.2%)	81(37.2)	1.859(1)	.173
Prior Violent	22 (24.7%)	15 (22.4%)	37(17.0)	.115 (1)	.735
Prior Other	11 (12.4%)	8 (11.9%)	19(8.7)	.006(1)	.937
Total Column	126	92	218		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
**p*<.05; ***p*<.01

As shown in Table 12, the chi-square analyses were not significant in the HOPE probation group for counts in prior drug: succeeded (57.3%) to failed (44.8%), χ^2 (1,81) = 2.403, p = 0.121; in prior property: succeeded (47.2%) to failed (58.2%), χ^2 (1,81) = 1.859, p = 0.173; in prior violent: succeeded (24.7%) to failed (22.4%), χ^2 (1,37) = 0.115, p = 0.735; and in "prior other": succeeded (12.4%) to failed (11.9%), χ^2 (1,19) = 0.006, p = 0.937.

The comparison of the amount of drug convictions prior to standard probation supervision between the succeeded (M = 0.97; S.D. = 1.298) and failed (M = 0.88; S.D. = 1.138) groups was not significant (p = 0.317) (Table 13). The prior property comparison in standard

probation was not significant in the succeeded (*M* = 0.79; S.D. = 1.351) and failed (*M* = 1.13; S.D. = 1.498) groups (*p* = 0.291).

Table 13
Standard prior conviction amount comparison between succeeded and failed groups

Prior Drug	*N*	Mean	SD	*t*	Df	*p*-value
Standard						
Succeed	71	0.97	1.298	-0.575	312	.317
Standard Failed	243	0.88	1.138			
Prior Property						
Standard						
Succeed	71	0.79	1.351	1.713	312	.291
Standard Failed	243	1.13	1.498			
Prior Violent						
Standard						
Succeed	71	0.42	0.730	-2.271	312	.001***
Standard Failed	243	0.22	0.630			
Prior Other						
Standard						
Succeed	71	0.08	0.280	0.579	312	.231
Standard Failed	243	0.12	0.420			

*p<.05; **p<.01; ***p<=.001

However, the comparison for prior violent conviction between standard probationers who succeeded (*M* = 0.42; S.D. = 0.730) and failed (*M* = 0.22; S.D. = 0.630) was significant ($p < 0.05$). The comparison for the category of "prior other" convictions was not significant between standard succeeded (*M* = 0.08; S.D. = 0.280) and failed (*M* = 0.12; S.D. = 0.420) groups (*p* = 0.231).

The categorical comparison of prior drug conviction for standard probationers between succeeded (45.1%) and failed (44.0%) groups was not significant, χ^2 (1,139) = 0.024, *p* = 0.877 (Table 14). However, the comparison of prior property convictions, although not significant, showed a strong trend between the succeeded (47.9%) and failed (60.9%) groups, χ^2 (1,182) = 3.822, *p* = 0.051.

Table 14
Standard prior conviction category comparison between standard succeeded and failed groups

	Standard Probation Groups				
Category Count	Succeed	Failed	Total Row	χ^2(df)	*p*
Prior Drug	32 (45.1%)	107 (44.0%)	139	.024(1)	.877
Prior Property	34 (47.9%)	148 (60.9%)	182	3.822(1)	.051
Prior Violent	21 (29.6%)	39 (16.0%)	60	6.506 (1)	.011*
Prior Other	6 (8.5%)	22 (9.1%)	28	.025(1)	.875
Total Column	93	316	409		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
*p<.05; **p<.01; ***p<=.001

The comparison of prior violent convictions category of the standard succeeded (29.6%) and failed (16.0%) groups was significant χ^2 (1,60) = 6.506, $p < 0.05$. The "prior other" convictions for standard succeeded (8.5%) and failed (9.1%) groups was not significant χ^2 (1,28) = 0.025, $p = 0.875$.

Comparing the similar outcomes between HOPE and standard probation, it appears that probationers with a prior drug and violent conviction were more likely to succeed supervision than probationers who had a prior property conviction. For prior other convictions, the succeeded and failed groups' conviction amount and category were evenly distributed for both HOPE and standard supervision.

Comparison of group new convictions after supervision completion.

As stated previously in the tables displaying prior convictions, the following tables illustrates the total amount of new crimes a probationer was convicted and sentenced after probation supervision completion; the numerical data is an inclusive amount of all offense counts. Following the amount table, a category conviction table was included to show the incidents of new convictions. An arrest resulting in two or more counts of drug, property, violent and/or other convictions, was recalculated and counted only once within each respected category.

Table 15

Total new conviction amount comparison between succeeded and failed groups

New Drug	*N*	Mean	SD	*t*	df	*p*-value
Total Succeed	160	0.15	0.596	3.892	468	.000***
Total Failed	310	0.46	0.905			
New Property						
Total Succeed	160	0.19	0.540	5.454	468	.000***
Total Failed	310	0.82	1.420			
New Violent						
Total Succeed	160	0.11	0.549	2.752	468	.000***
Total Failed	310	0.36	1.057			
New Other						
Total Succeed	160	0.16	0.548	0.722	468	.293
Total Failed	310	0.20	0.526			

*p<.05; **p<.01; ***p<=.001

The comparison of the amount of new drug convictions after total probation supervision between the succeeded (M = 0.15; S.D. = 0.596) and failed (M = 0.46; S.D. = 0.905) groups was significant ($p < 0.001$) (Table 15). The comparison of new property convictions in total probation was significant in the succeeded (M = 0.19; S.D. = 0.540) and failed (M = 0.82; S.D. = 1.420) groups ($p < 0.001$). The comparison of new violent convictions between the total probation succeeded (M = 0.11; S.D. = 0.549) and failed (M = 0.36; S.D. = 1.057) groups was also significant ($p < 0.001$). The comparison of "new other" convictions was not significant between the total probation succeeded (M = 0.16; S.D. = 0.548) and failed (M = 0.20; S.D. = 0.526) groups ($p = 0.293$). The t-test results indicated that a probationer who successfully completes probationary supervision is less likely to commit new drug, property, or violent crimes.

Table 16
Total new conviction comparison between succeeded and failed groups

Total Probation Groups					
Category Count	Succeeded	Failed	Total Row	χ^2(df)	*p*
Any New Drug	13 (8.1%)	79 (25.5%)	92(19.6)	20.200(1)	.000***
Any New Property	22 (13.8%)	121 (39.0%)	143(30.4)	31.866(1)	.000***
Any New Violent	9 (5.6%)	61 (19.7%)	70(14.9)	16.441(1)	.000***
Any New Other	17 (10.6%)	51 (16.5%)	68(14.5)	2.895(1)	.089
Total Column	61	312	373		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
*p<.05; **p<.01; ***p<=.001

The comparison in the new conviction category for drugs, the total probation succeeded (8.1%) and failed (25.5%) groups was significant χ^2 (1,92) = 20.200, $p < 0.001$ (Table 16). The comparison in the new property convictions between succeeded (13.8%) and failed (39.0%) groups were significant, χ^2 (1,143) = 31.866, $p < 0.001$. Also, the comparison in new violent convictions between the succeeded (5.6%) and the failed (19.7%) groups was significant, χ^2 (1,70) = 16.441, $p < 0.001$. The comparison in "new other" convictions between succeeded (10.6%) and failed (16.5%) groups was not significant, χ^2 (1,68) = 2.895, $p = 0.089$. The categorical conviction outcomes followed the same trend as the amount conviction outcomes, and although not significant, the "new other" convictions in Table 16 followed the same trend as the new drug, new property and new violent categorical convictions, where the succeeded group had a lower percentage of new convictions when compared with the failed group.

The comparison in the amount of new drug convictions in HOPE probation supervision between the succeeded ($M = 0.17$; S.D. = 0.661) and failed ($M = 0.21$; S.D. = 0.509) groups was not significant ($p = 0.602$) (Table 17). The comparison in new property convictions in HOPE was significant between the succeeded ($M = 0.18$; S.D. = 0.441) and failed ($M = 0.54$; S.D. = 1.064) groups ($p < 0.001$).

Table 17
HOPE new conviction amount comparison between succeeded and failed groups

New Drug	*N*	Mean	SD	*t*	df	*p*-value
HOPE Succeeded	89	0.17	0.661	0.416	154	.602
HOPE Failed	67	0.21	0.509			
New Property						
HOPE Succeeded	89	0.18	0.441	2.863	154	.000***
HOPE Failed	67	0.54	1.064			
New Violent						
HOPE Succeeded	89	0.12	0.618	1.577	154	.010**
HOPE Failed	67	0.39	1.414			
New Other						
HOPE Succeeded	89	0.13	0.431	1.048	154	.078
HOPE Failed	67	0.21	0.445			

*p<.05; **p<=.01; ***p<=.001

Also the comparison in new violent convictions between HOPE succeeded (M = 0.12; S.D. = 0.618) and failed (M = 0.39; S.D. = 1.414) was significant (p = 0.01). The comparison in the category "new other" convictions was not significant between HOPE succeeded (M = 0.13; S.D. = 0.431) and failed (M = 0.21; S.D. = 0.445) groups (p = 0.078).

The chi-square analyses found similar results in the HOPE group's conviction category comparisons as the HOPE amount (Table 18), where new drug convictions was not significant: succeeded (9.0%) compared to failed (16.4%), χ^2 (1,19) = 1.972, p = 0.160; new property conviction was significant: succeeded (15.7%) compared to failed (29.9%), χ^2 (1,34) = 4.471, p < 0.05; new violent convictions was significant: succeeded (5.6%) compared to failed (19.4%), χ^2 (1,18) = 7.116, p < 0.01; and new other convictions was not significant: succeeded (10.1%) compared to failed (19.4%), χ^2 (1,22) = 2.724, p = 0.099. Each category displayed a similar trend of lower new convictions for probationers who successfully completed HOPE supervision than those who failed HOPE probation.

Table 18

HOPE new conviction category comparison between succeeded and failed groups

	HOPE Probation Groups				
Category Count	Succeed	Failed	Total Row	χ^2(df)	*p*
Any New Drug	8 (9.0)	11 (16.4)	19(12.2)	1.972(1)	.160
Any New Property	14 (15.7)	20 (29.9)	34(21.8)	4.471(1)	.034*
Any New Violent	5 (5.6)	13 (19.4)	18(11.5)	7.116(1)	.008**
Any New Other	9 (10.1)	13 (19.4)	22(14.1)	2.724(1)	.099
Total Column	36	57	93		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
*p<.05; **p<.01

Table 19

Standard new conviction amount comparison between succeeded and failed groups

New Drug	*N*	Mean	SD	*t*	df	*p*-value
Standard						
Succeeded	71	0.13	0.505	3.323	312	.000***
Standard Failed	243	0.53	0.976			
New Property						
Standard						
Succeeded	71	0.20	0.646	3.858	312	.000***
Standard Failed	243	0.90	1.496			
New Violent						
Standard						
Succeeded	71	0.10	0.452	2.180	312	.000***
Standard Failed	243	0.35	0.939			
New Other						
Standard						
Succeeded	71	0.20	0.668	0.004	312	.792
Standard Failed	243	0.20	0.547			

*p<.05; **p<.01; ***p<=.001

The comparison in the new drug conviction amount of standard probation supervision comparison between the succeeded (M = 0.13; S.D. = 0.505) and failed (M=.53; S.D. = 0.976) groups was significant ($p < 0.001$) (Table 19). The comparison in new property convictions in standard probation was significant in the succeeded (M = 0.20; S.D. = 0.646) and failed (M= 0.90; S.D. =1.496) groups ($p < 0.001$). The comparison in new violent convictions between standard probation succeeded (M = 0.10; S.D. = 0.452) and failed (M = 0.35; S.D. = 0.939) groups was also significant ($p < 0.001$). The comparison in the category of "new other" convictions was not significant between the succeeded (M = 0.20; S.D. = 0.668) and failed (M = 0.20; S.D. = 0.547) groups (p = 0.792). The t-test results indicated that a probationer who successfully completes probation supervision is less likely to commit new drug, property, or violent crimes.

Table 20
Standard new conviction category comparison between succeeded and failed groups

	Standard Probation Groups				
Category Count	Succeed	Failed	Total Row	χ^2(df)	*p*
Any New Drug	5 (7.0)	68 (28.0)	73(23.2)	13.504(1)	.000***
Any New Property	8 (11.3)	101 (41.6)	109(34.7)	22.253(1)	.000***
Any New Violent	4 (5.6)	48 (19.8)	52(16.6)	7.927(1)	.005**
Any New Other	8 (11.3)	38 (15.6)	46(14.6)	.839(1)	.360
Total Column	25	255	280		

Note. Numbers in parentheses indicate within succeeded or failed groups percentages.
*p<.05; **p<.01; ***p<=.001

The chi-square analyses found significant results for standard probation in the categories new drug convictions (Table 20): succeeded (7.0%) vs failed (28.0%), χ^2 (1,73) = 13.504, $p < 0.001$; new property conviction: succeeded (11.3%) compared to failed (41.6%), χ^2 (1,109) = 22.253, $p < 0.001$; new violent convictions: succeeded (5.6%) compared to failed (19.8%), χ^2 (1,52) = 7.927, $p < 0.01$; and new other convictions: succeeded (11.3%) compared to failed (15.6%),

χ^2 (1,46) = 0.839, p = 0.360. Each category displayed a similar association of lower new convictions of probationers who successfully completed standard probation than those who failed standard probation.

Regression analyses of independent variables to predict new convictions.

Linear and logistic regressions were utilized to determine if any factors were a predictor of future crimes. In Model 1 (Table 21), demographic variables were analyzed: age, gender, ethnicity, education scale (LSI-R items15 to 17), and employment scale (LSI-R items 11 to 14 and 18 to 20). In Model 2, in addition to demographic variables the following LSI-R scales were evaluated: criminal history, family/marital, companions, alcohol/drug problems, emotional/ personal and attitude/orientation. Evaluating these six scales is consistent with the ACSB procedure of determining the three highest scale scores from these six scales; this is called "The High Three." In Model 3, in addition to the Model 1 and Model 2 variables, the financial LSI-R scale was included due to the earlier multivariate analyses that were statistically significant between the probation succeeded and failed groups. The leisure scale was included to detect if too much free time on hand would lead to a negative supervision outcome.

The following LSI-R item percentages were significantly higher in HOPE probation than standard probation and were included in Model 3: 9) probation/parole suspended, 17) suspended or expelled from school, 28) three or more address changes in a year, 34) some criminal friends, 35) few non-criminal acquaintances, 37) prior alcohol problem, 38) prior drug problem, 39) current alcohol problem, 40) current drug problem, 41) alcohol/drug law violation, and 45) alcohol/drug other clinical indicators. Multicollinearity was not an issue with these LSI-R items in Model 3. The following scales were not included in Model 3 due to multicollinearity issues: alcohol/drug problems, companions, and accommodation with the LSI-R items. The following regression model utilized the dependent variable success, to determine which independent variables would predict a successful probation outcome.

Table 21

Regression analysis of dependent variable succeed

DV: Succeed	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.042	.247	.065	.488	.200	.041*	.012	.592	.018	.888	.046	.874
Constant	-.394	.676	-.051	.965	-.170	.912	-1.845	.009**	-2.113	.005**	-2.389	.008**
Age	.005	.761	.017	.358	.014	.516	.012	.353	.010	.488	.005	.762
Gender	.857	.054	.735	.116	1.005	.079	.087	.787	.082	.812	.083	.818
Ethnicity	.197	.123	.182	.160	.314	.042*	-.067	.531	-.066	.541	-.062	.581
Education	-.132	.351	-.140	.338	.008	.970	-.065	.595	-.079	.546	-.134	.392
Employment	-.018	.850	.002	.987	.101	.403	.106	.157	.082	.291	.076	.394
Criminal history scale			-.118	.162	-.013	.918			.004	.958	.025	.790
Family/Marital scale			-.058	.718	-.085	.646			-.016	.899	-.014	.916
Companions scale			.055	.692	x	x			.025	.822	x	x
Alcohol/Drug scale			-.066	.498	x	x			.063	.388	x	x
Emotional/Personal scale			.123	.363	.192	.222			.035	.740	.024	.821
Attitude/Orientation scale			-.086	.520	-.171	.303			.068	.516	.104	.363
Financial scale					-.027	.928					.342	.126
Leisure/Recreation scale					.241	.441					-.161	.497
Probation/Parole susp (9)					-.941	.099					-.228	.562
Suspend/Expelled sch (17)					-1.390	.017*					-.093	.793
3+ address change (28)					-1.254	.007**					-.120	.701
Some crim friends (34)					-.710	.175					.166	.631
Few non-crim acquain (35)					1.043	.021*					.005	.987
Prior alcohol prob (37)					-.158	.763					-.108	.769
Prior drug prob (38)					.370	.704					.855	.137
Current alcohol prob (39)					-.273	.577					.502	.216
Current drug prob (40)					-.102	.899					-.604	.253
A/D law violation (41)					-.411	.503					.434	.347
A/D other clinical (45)					.006	.992					-.627	.292

*p<.05; **p<.01

In Table 21, the dependent binary variable "success" indicates a probationer's success (1) or failure (0) in probation supervision. In Model 3 of HOPE probation, only three items were significant: item 17 indicates that if a probationer was suspended or expelled from school, the probability of a probation failure increases. Item 28 indicates that if the probationer moves three or more times in a year (this is scored when an individual is usually homeless) the probability of failure increases. However, in item 35, should a probationer have more criminal acquaintances than non-criminal acquaintances, the probability of success increases. This suggests that criminal acquaintances may not be a factor if the probationer has other supportive non-criminal individuals to rely on.

The following regression model was designed to predict any new convictions a probationer may incur post-probation; the succeed variable was included as an independent variable with the demographic variables. In Table 22, the dependent variable any new conviction has a binary outcome of no conviction (0) or yes (1) a new conviction post-probation. In all three models, the succeed and age variables were significant in both probation models; if a probationer successfully succeeds supervision, the individual is less likely to incur a new conviction; also the older the probationer, the probability of having a new conviction decreases. In Model 3 of HOPE probation item 35 was significant; if a probationer has few non-criminal acquaintances, probability of incurring a new conviction increases. Also in Model 3 for standard probation, the leisure/recreation scale was significant; if the probationer has too much free time on-hand, the likelihood of a new conviction increases.

Table 22

Regression analysis of dependent variable any new conviction (post-probation)

DV: Any New Conviction	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.151	.000***	.191	.001***	.235	.010**	.193	.000***	.204	.000***	.242	.000***
Constant	.973	.348	.815	.518	1.253	.427	3.168	.000***	3.114	.000***	2.885	.001***
Succeed	-1.160	.001***	-1.260	.001***	-1.363	.002**	-1.915	.000***	-1.974	.000***	-2.019	.000***
Age	-.050	.005**	-.057	.007**	-.054	.014*	-.059	.000***	-.064	.000***	-.060	.000***
Gender	-.174	.694	-.009	.985	.046	.929	-.286	.345	-.460	.159	-.608	.082
Ethnicity	.163	.234	.155	.270	.140	.374	-.007	.943	-.013	.902	-.064	.559
Education	-.057	.705	-.102	.514	-.059	.788	-.039	.733	-.099	.429	-.030	.842
Employment	.157	.132	.178	.102	.168	.187	-.079	.244	-.081	.245	-.107	.188
Criminal history scale			.087	.331	-.017	.893			-.002	.970	-.084	.356
Family/Marital scale			-.360	.048	-.468	.021*			.180	.152	.283	.042*
Companions scale			.289	.060	x	x			.021	.839	x	x
Alcohol/Drug scale			-.075	.485	x	x			-.031	.650	x	x
Emotional/Personal scale			.188	.193	.230	.155			.088	.389	.129	.232
Attitude/Orientation scale			-.067	.648	-.083	.628			.071	.490	.058	.612
Financial scale					-.170	.565					-.264	.213
Leisure/Recreation scale					.294	.382					.508	.031*
Probation/Parole susp (9)					.770	.190					.571	.132
Suspend/Expelled sch (17)					-.189	.744					-.168	.619
3+ address change (28)					.091	.842					-.395	.205
Some crim friends (34)					.080	.876					-.171	.592
Few non-crim acquain (35)					.891	.042*					.313	.260
Prior alcohol prob (37)					.511	.327					-.541	.115
Prior drug prob (38)					-1.394	.184					-.031	.953
Current alcohol prob (39)					-.588	.245					-.104	.791
Current drug prob (40)					.615	.489					-.352	.489
A/D law violation (41)					.063	.925					.561	.178
A/D other clinical (45)					-.064	.914					.205	.711

*p<.05; **p<=.01;***p< =.001

Table 23

Regression analysis of dependent variable new conviction amount (post-probation)

DV: New Conviction Amount	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
R squared	.141	.001***	.178	.004**	.223	.042*	.132	.000***	.165	.000***	.204	.000***
Constant	1.677	.020*	1.830	.030*	1.557	.132	3.689	.000***	3.286	.000***	3.162	.000***
Succeed	-.727	.005**	-.733	.005**	-.620	.028*	-1.261	.000***	-1.276	.000***	-1.226	.000***
Age	-.033	.005**	-.038	.006**	-.036	.014*	-.047	.000***	-.050	.000***	-.043	.002**
Gender	.148	.638	.272	.407	.397	.264	-.139	.615	.124	.672	.038	.899
Ethnicity	.064	.499	.056	.557	.020	.850	-.031	.733	-.032	.726	-.060	.519
Education	.100	.341	.086	.422	-.037	.801	-.122	.236	.093	.395	.086	.496
Employment	.087	.216	.083	.246	.046	.569	-.050	.397	-.063	.295	-.067	.321
Criminal history scale			.012	.845	-.064	.442			.066	.248	.001	.988
Family/Marital scale			-.137	.246	-.131	.311			-.172	.118	-.087	.449
Companions scale			-.086	.403	x	x			.230	.013*	x	x
Alcohol/Drug scale			.036	.613	x	x			.020	.736	x	x
Emotional/Personal scale			.181	.064	.170	.108			-.109	.216	-.084	.342
Attitude/Orientation scale			.055	.577	.017	.879			-.016	.858	-.013	.889
Financial scale					.016	.937					-.113	.534
Leisure/Recreation scale					.195	.361					.225	.254
Probation/Parole susp (9)					.690	.078					.408	.198
Suspend/Expelled sch (17)					.543	.170					.216	.453
3+ address change (28)					.051	.867					-.464	.077
Some crim friends (34)					-.304	.378					-.033	.905
Few non-crim acquain (35)					-.130	.658					.795	.001***
Prior alcohol prob (37)					.188	.597					-.477	.105
Prior drug prob (38)					-.084	.902					.248	.574
Current alcohol prob (39)					.078	.816					.066	.846
Current drug prob (40)					-.120	.830					-.268	.536
A/D law violation (41)					.388	.360					.423	.231
A/D other clinical (45)					.012	.975					.253	.592

*p<.05; **p<=.01;***p< =.001

Table 23 displays the regression model that was used to analyze the new convictions amount a probationer may incur post-probation; the "succeed" variable was included as an independent variable. The regression model's dependent variable "new conviction" amount was measured as a continuous variable. The significant predictors for both HOPE and standard probation were similar in all models. The "succeed" variable indicates that a successful probation outcome reduces the amount of new convictions acquired post-probation. Also, as the individual ages, the amount of new convictions deceases. In Model 3 of standard probation, item 35 was significant, which indicates that few non-criminal acquaintances increase the probable amount of new conviction post-probation.

Table 24

Regression analysis of dependent variable any new drug conviction (post-probation)

DV: Any New Drug	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.106	.008**	.119	.071	.178	.136	.082	.000***	.096	.002**	.157	.000***
Constant	2.555	.134	1.684	.390	.464	.029*	.078	.914	-.038	.961	-1.021	.283
Succeed	-.445	.403	-.351	.529	-.598	.393	-1.628	.001***	-1.664	.001***	-1.937	.000***
Age	-.101	.005**	-.084	.041*	-.086	.084	-.043	.004**	-.046	.008**	-.041	.037*
Gender	-1.695	.118	-1.837	.099	-1.402	.259	-.226	.516	-.018	.961	-.092	.817
Ethnicity	-.270	.182	-.240	.239	-.068	.775	.105	.363	.111	.347	.093	.463
Education	-.256	.274	-.203	.395	-.076	.818	-.124	.320	-.115	.399	-.195	.248
Employment	.039	.803	.049	.763	.064	.745	.036	.607	.026	.717	.031	.721
Criminal history scale			-.161	.242	-.256	.218			.060	.404	-.016	.867
Family/Marital scale			.037	.883	-.122	.666			-.139	.317	-.067	.662
Companions scale			-.082	.711	x	x			.029	.794	x	x
Alcohol/Drug scale			.173	.328	x	x			.077	.300	x	x
Emotional/Personal scale			-.123	.609	-.224	.472			-.153	.193	-.144	.244
Attitude/Orientation scale			.154	.519	.185	.528			-.056	.622	-.069	.590
Financial scale					-.342	.529					.018	.941
Leisure/Recreation scale					1.008	.141					.205	.455
Probation/Parole susp (9)					.245	.788					.609	.144
Suspend/Expelled sch (17)					-.450	.621					.195	.601
3+ address change (28)					1.040	.185					-.736	.042*
Some crim friends (34)					-.106	.896					.111	.760
Few non-crim acquain (35)					-.562	.466					.240	.446
Prior alcohol prob (37)					.739	.414					-.795	.049*
Prior drug prob (38)					-.222	.889					.781	.192
Current alcohol prob (39)					-.171	.827					.417	.373
Current drug prob (40)					-.952	.480					-1.226	.057
A/D law violation (41)					.679	.477					1.898	.001***
A/D other clinical (45)					1.750	.048*					.247	.707

*p<.05; **p<=.01;***p<=.001

In Table 24, the regression model was designed to predict any new drug convictions a probationer may incur post-probation; the "succeed" variable was included as an independent variable in addition to the demographic variables. The dependent variable any new drug conviction is measured a no (0) or yes (1) new drug conviction. In Models 1 and 2 of HOPE probation, the significant age variable indicates that as a probationer ages, the less likely a new drug conviction would occur. In Model 3, the significance of item 45 may indicate that a probationer is having difficulty abstaining from drugs, or was unwilling to seek help to cease drug use; therefore, the probability of a new drug offense increases. In standard probation, all models indicated that a successful probation outcome and a probationer's higher age significantly reduces the tendency to incur a new drug conviction. Item 41 was also significant; if a probationer had a previous drug conviction prior to the start of supervision, the individual has a high probability of obtaining a new drug conviction. Although item 28 was significant, three or more address change was not a predictor for a new drug conviction.

The following regression model (Table 25) was designed to predict any new property convictions a probationer may incur post-probation; the "succeed" variable was included as an independent variable in addition to the demographic variables. The dependent variable any new property conviction was measured no (0) or yes (1) for new property conviction. In Models 1 and 2 of HOPE probation had a significant succeed variable and a successful probation outcome reduces the chance of a new property conviction occurring; where as in Model 3, the significance of item 9 predicts that a previous probation or parole suspension increases the probability of a new property conviction. In standard probation Models 1, 2, and 3 the significant variables shows that a successful probation outcome and an increase in the probationer's age, reduces the chances of a new property conviction. Item 35 significance predicts that a probationer having few non-criminal acquaintances predicts new property convictions.

Table 25

Regression analysis of dependent variable any new property conviction (post-probation)

DV: Any New Property			HOPE						Standard			
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.089	.024*	.119	.071	.196	.066	.118	.000***	.137	.000***	.180	.000***
Constant	-1.726	.192	-2.519	.121	-1.849	.367	1.064	.101	.928	.182	1.508	.059
Succeed	-.882	.035*	-.851	.048*	-.498	.321	-1.687	.000***	-1.723	.000***	-1.709	.000***
Age	-.033	.124	-.045	.079	-.056	.052	-.038	.004**	-.042	.006**	-.043	.011*
Gender	.006	.991	.230	.684	.368	.580	-.027	.929	.043	.895	-.125	.717
Ethnicity	.225	.169	.244	.148	.090	.644	-.019	.851	-.029	.782	-.048	.660
Education	-.118	.504	-.160	.385	-.227	.396	.161	.152	.109	.374	.126	.395
Employment	.278	.060	.264	.081	.151	.372	-.081	.196	-.081	.216	-.110	.148
Criminal history scale			.135	.200	-.033	.833			.044	.500	-.053	.545
Family/Marital scale			-.248	.221	-.256	.267			-.045	.715	.037	.787
Companions scale			.131	.461	x	x			.188	.070	x	x
Alcohol/Drug scale			.098	.461	x	x			-.101	.128	x	x
Emotional/Personal scale			.171	.294	.129	.514			.070	.488	.060	.572
Attitude/Orientation scale			-.086	.627	-.196	.364			.066	.520	.079	.491
Financial scale					.415	.292					-.044	.835
Leisure/Recreation scale					.004	.991					.105	.661
Probation/Parole susp (9)					1.916	.011*					.683	.066
Suspend/Expelled sch (17)					.745	.313					.140	.675
3+ address change (28)					.735	.181					-.221	.481
Some crim friends (34)					-.331	.594					-.325	.314
Few non-crim acquain (35)					.218	.682					.717	.011*
Prior alcohol prob (37)					.695	.299					-.171	.608
Prior drug prob (38)					-.561	.671					-.135	.791
Current alcohol prob (39)					.144	.805					-.668	.097
Current drug prob (40)					.127	.906					.055	.914
A/D law violation (41)					.190	.809					-.249	.544
A/D other clinical (45)					-.228	.771					-.101	.857

*p<.05; **p<=.01;***p< =.001

The following regression model (Table 26) was designed to predict any new violent convictions a probationer may incur post-probation; the "succeed" variable was included as an independent variable in addition to the demographic variables. Table 16 shows that HOPE probation successes in Models 1 and 2, would reduce new violent convictions; however, the emotional/personal scale show that a probationer with mental health issues may incur a new violent crime. In standard probation, Models 1, 2, and 3 show that a successful probation outcome, an increase in probationer's age, and a female gender, would be less likely to incur a new violent conviction

Table 26

Regression analysis of dependent variable any new violent conviction (post-probation)

DV: Any New Violent			HOPE						Standard			
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.077	.051	.126	.050*	.191	.081	.097	.000***	.107	.000***	.141	.002**
Constant	-1.364	.398	-2.034	.324	-22.948	.998	.084	.919	.158	.859	-.897	.429
Succeed	-1.288	.024*	-1.422	.020*	-1.412	.071	-1.382	.012*	-1.410	.011*	-1.377	.015*
Age	-.027	.315	-.024	.456	-.039	.319	-.042	.015*	-.055	.007**	-.055	.018*
Gender	-.629	.439	-.553	.522	-.335	.745	-1.721	.005**	-1.680	.008**	-1.656	.011*
Ethnicity	.041	.842	-.011	.958	.064	.797	-.015	.912	-.017	.901	-.079	.578
Education	.318	.175	.354	.157	.404	.266	.189	.181	.159	.308	.175	.339
Employment	.044	.769	-.017	.918	-.179	.411	-.040	.600	-.043	.588	-.092	.329
Criminal history scale			-.079	.557	-.223	.287			.101	.227	.103	.350
Family/Marital scale			-.069	.795	-.206	.505			-.051	.752	-.034	.842
Companions scale			-.166	.484	x	x			-.027	.836	x	x
Alcohol/Drug scale			.339	.061	x	x			.081	.349	x	x
Emotional/Personal scale			.303	.149	.617	.038*			-.006	.961	-.002	.988
Attitude/Orientation scale			-.161	.535	-.151	.640			-.175	.200	-.235	.126
Financial scale					-.137	.804					.029	.913
Leisure/Recreation scale					.584	.298					1.011	.010
Probation/Parole susp (9)					.640	.503					.087	.848
Suspend/Expelled sch (17)					.047	.962					-.254	.554
3+ address change (28)					.954	.223					-.345	.379
Some crim friends (34)					.308	.748					.280	.507
Few non-crim acquain (35)					-.862	.248					-.012	.972
Prior alcohol prob (37)					1.221	.190					.083	.857
Prior drug prob (38)					20.902	.998					-.395	.530
Current alcohol prob (39)					-.787	.321					.647	.173
Current drug prob (40)					-1.481	.310					.505	.428
A/D law violation (41)					2.222	.146					-.434	.395
A/D other clinical (45)					.123	.899					-.297	.705

*p<=.05; **p<=.01;***p<=.001

The following prediction model (Table 27) was designed to determine if any new other convictions a probationer may incur post-probation; the "succeed" variable was included as an independent variable in addition to the demographic variables. Table 27 shows one significant succeed variable in Model 3 of HOPE probation, where succeeding probation reduces the chance of incurring a new other conviction. In standard probation, Model 3 shows that a previous alcohol or drug law violation increase the chance of obtaining a new other conviction.

Table 27

Regression analysis of dependent variable any new other conviction (post-probation)

DV: Any New Other	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.066	.102	.130	.042*	.228	.014*	.017	.506	.032	.611	.064	.592
Constant	-1.873	.212	-.129	.941	.027	.990	-.311	.705	-.739	.404	-1.196	.270
Succeed	-.869	.081	-.966	.065	-1.495	.023*	-.345	.411	-.410	.338	-.426	.333
Age	-.033	.193	-.054	.084	-.040	.292	-.031	.076	-.027	.166	-.033	.129
Gender	.684	.228	1.103	.097	.717	.351	.291	.435	.334	.413	.213	.615
Ethnicity	.235	.232	.255	.234	.156	.560	-.075	.560	-.078	.557	-.089	.523
Education	.216	.302	.196	.386	.105	.778	-.020	.892	-.017	.916	.012	.950
Employment	.056	.695	.127	.427	.061	.770	-.045	.565	-.076	.366	-.059	.549
Criminal history scale			.139	.294	.191	.299			-.028	.738	-.060	.581
Family/Marital scale			-.416	.123	-.130	.701			.079	.608	.175	.308
Companions scale			-.120	.538	x	x			.082	.535	x	x
Alcohol/Drug scale			-.268	.065	x	x			.076	.379	x	x
Emotional/Personal scale			.104	.600	.105	.691			-.207	.136	-.191	.183
Attitude/Orientation scale			-.096	.655	.068	.808			.124	.333	.102	.471
Financial scale					-.086	.851					.012	.965
Leisure/Recreation scale					-.528	.340					.188	.568
Probation/Parole susp (9)					-.319	.696					-.015	.974
Suspend/Expelled sch (17)					.627	.491					-.237	.577
3+ address change (28)					-1.220	.081					-.027	.944
Some crim friends (34)					-1.414	.065					-.347	.406
Few non-crim acquain (35)					.619	.354					.501	.166
Prior alcohol prob (37)					-.737	.370					.368	.369
Prior drug prob (38)					-.718	.651					.948	.164
Current alcohol prob (39)					-.556	.567					-1.026	.054
Current drug prob (40)					-.932	.586					-1.268	.071
A/D law violation (41)					2.607	.120					1.326	.034*
A/D other clinical (45)					-18.766	.998					.576	.388

*p<=.05; **p<=.01;***p<=.001

Regression models of conviction severity were created to predict if any independent variables would predict felony class B or C (there was no new class A severity), misdemeanors, or petty misdemeanors; demographic variables were used, as well as the succeed variable. The following model displays the predictor variables for new Class B felony convictions. Table 28 shows in HOPE probation Model 3, that although significant, few non-criminal friends were not a predictor of increased class B felony convictions. For standard probation, all models showed significance in probation successes as a factor to reduce class B felony convictions. Also the companion scale in Model 2 indicated that a criminal social environment would increase the chances of a new class B conviction.

Table 28

Regression analysis of dependent variable any new class B felony severity (post-probation)

DV: New FB Severity	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.041	.369	.060	.645	.119	.661	.068	.001***	.099	.001***	.124	.011*
Constant	-2.664	.346	-2.265	.487	-20.357	.998	-.305	.763	-1.088	.352	-1.145	.398
Succeed	-1.041	.241	-1.092	.234	-.645	.607	-2.291	.026*	-2.358	.023*	-2.405	.022*
Age	-.041	.378	-.037	.500	.018	.802	-.043	.051	-.029	.245	-.034	.224
Gender	-.348	.761	-.343	.778	-1.801	.308	.052	.912	.374	.468	.281	.603
Ethnicity	-.151	.615	-.184	.555	-.473	.335	-.256	.097	-.252	.128	-.266	.130
Education	.267	.471	.213	.585	.248	.700	.298	.089	.342	.069	.283	.228
Employment	.274	.371	.247	.445	.476	.229	.008	.935	.001	.995	-.012	.926
Criminal history scale			-.194	.331	-.684	.126			-.074	.468	.033	.798
Family/Marital scale			.232	.553	.146	.775			.143	.465	-.087	.695
Companions scale			-.347	.297	x	x			.417	.018*	x	x
Alcohol/Drug scale			.108	.676	x	x			-.033	.744	x	x
Emotional/Personal scale			.245	.459	.737	.227			.322	.083	-.256	.175
Attitude/Orientation scale			.196	.604	.262	.594			.039	.818	.091	.632
Financial scale					-1.334	.190					-.217	.509
Leisure/Recreation scale					-.144	.882					.078	.843
Probation/Parole susp (9)					2.150	.291					-.784	.173
Suspend/Expelled sch (17)					.669	.724					.020	.970
3+ address change (28)					1.671	.175					-.563	.283
Some crim friends (34)					.863	.569					.562	.320
Few non-crim acquain (35)					-2.925	.036*					.633	.155
Prior alcohol prob (37)					-.584	.767					-.788	.155
Prior drug prob (38)					-.402	1.000					1.363	.104
Current alcohol prob (39)					1.330	.427					.394	.554
Current drug prob (40)					19.488	.998					-.179	.812
A/D law violation (41)					-2.021	.307					-.242	.708
A/D other clinical (45)					-1.249	.538					-.260	.755

*p<.05; **p<=.01;***p< =.001

Table 29 displays the predictor variables for new class C felony convictions in HOPE and standard probation. Models 1, 2, and 3 in HOPE probation shows a successful probation outcome reduces class C felony convictions and Model 1 indicates as probationer ages, class C felony convictions would be reduced. The companion scale in Model 2 predicts that a criminal social environment increases the probability of new class C convictions. In standard probation, class C felony convictions are reduced if a probationer is older and successfully completes probation. Few non-criminal acquaintances is an increased factor for new class C felonies; however, prior alcohol problem was not factor for increased convictions.

Table 29

Regression analysis of dependent variable any new class C felony severity (post-probation)

DV: New FC Severity	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.123	.002**	.178	.002**	.197	.062	.136	.000***	.156	.000***	.225	.000***
Constant	-.235	.886	-1.863	.351	-2.666	.286	.814	.223	.547	.448	.850	.319
Succeed	-1.620	.004**	-1.874	.002**	-1.629	.020**	-2.365	.000***	-2.410	.000***	-2.653	.000***
Age	-.072	.018*	-.059	.108	-.062	.129	-.042	.002**	-.044	.005**	-.056	.003**
Gender	.830	.188	.866	.207	1.108	.181	-.035	.911	.210	.537	-.052	.887
Ethnicity	.404	.065	.480	.049*	.453	.086	.054	.612	.057	.602	.006	.959
Education	-.148	.499	-.213	.379	-.385	.304	-.028	.808	-.049	.701	.001	.996
Employment	.003	.984	.001	.996	-.143	.439	-.017	.793	-.023	.732	-.132	.106
Criminal history scale			-.132	.346	-.296	.132			.060	.372	-.035	.710
Family/Marital scale			-.052	.844	-.152	.601			-.178	.170	-.077	.594
Companions scale			.667	.028*	x	x			.204	.055	X	x
Alcohol/Drug scale			-.152	.346	x	x			-.020	.770	X	x
Emotional/Personal scale			.000	.999	.032	.908			-.086	.423	-.088	.442
Attitude/Orientation scale			.240	.306	.180	.512			.003	.977	-.050	.682
Financial scale					.255	.623					.145	.520
Leisure/Recreation scale					.355	.462					.658	.018*
Probation/Parole susp (9)					1.197	.158					.940	.018*
Suspend/Expelled sch (17)					.821	.393					-.371	.306
3+ address change (28)					.569	.408					-.598	.076
Some crim friends (34)					1.739	.168					-.251	.457
Few non-crim acquain (35)					.909	.216					.832	.006**
Prior alcohol prob (37)					.458	.595					-1.075	.004**
Prior drug prob (38)					.035	.983					.107	.848
Current alcohol prob (39)					-.226	.772					.173	.686
Current drug prob (40)					-.788	.596					.176	.756
A/D law violation (41)					.181	.847					.365	.412
A/D other clinical (45)					-.150	.871					-.001	.999

*p<.05; **p<=.01;***p< =.001

The following model displays the predictor variables for reducing new misdemeanor convictions in HOPE probation (Models 2 and 3) and standard probation (Models 1, 2, and 3) was age and a successful probation outcome. Also in standard probation Model 3, the female gender decreased the likelihood of obtaining a new misdemeanor conviction (Table 30).

Table 30

Regression analysis of dependent variable any new misdemeanor severity (post-probation)

DV: New MD Severity	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
R squared	.095	.016*	.164	.006**	.231	.012*	.073	.001***	.096	.001***	.137	.003**
Constant	-.639	.654	1.168	.500	.010	.996	1.022	.141	.549	.456	.434	.614
Succeed	-.886	.060	-1.006	.044*	-1.697	.007**	-1.144	.005**	-1.197	.003**	-1.293	.003**
Age	-.047	.060	-.074	.019*	-.077	.040*	-.032	.023*	-.036	.030*	-.042	.023*
Gender	.311	.581	.583	.362	.549	.461	-.700	.056	-.757	.053	-.919	.025*
Ethnicity	-.057	.747	-.075	.698	-.046	.847	-.092	.393	-.088	.424	-.105	.368
Education	.305	.132	.291	.187	.108	.738	-.018	.881	-.054	.681	-.016	.918
Employment	.116	.410	.185	.235	.128	.532	-.091	.158	-.143	.038*	-.099	.220
Criminal history scale			.201	.105	.333	.056			-.006	.930	.067	.473
Family/Marital scale			-.382	.126	-.247	.387			-.007	.959	.115	.437
Companions scale			-.088	.633	x	x			-.051	.639	x	x
Alcohol/Drug scale			-.204	.146	x	x			.171	.023*	x	x
Emotional/Personal scale			-.029	.884	-.058	.814			.067	.529	-.138	.220
Attitude/Orientation scale			-.297	.173	-.308	.243			-.007	.947	.059	.630
Financial scale					.420	.354					-.351	.125
Leisure/Recreation scale					.620	.271					.104	.684
Probation/Parole susp (9)					-.866	.254					-.760	.058
Suspend/Expelled sch (17)					.122	.881					-.389	.268
3+ address change (28)					-.898	.144					-.244	.457
Some crim friends (34)					-1.055	.133					-.210	.550
Few non-crim acquain (35)					.569	.349					.217	.472
Prior alcohol prob (37)					.008	.992					.584	.100
Prior drug prob (38)					-1.298	.397					1.065	.064
Current alcohol prob (39)					-.747	.365					-.642	.118
Current drug prob (40)					.010	.994					-.291	.585
A/D law violation (41)					1.528	.204					.439	.333
A/D other clinical (45)					-.987	.407					-.407	.498

*p<.05; **p<=.01;***p< =.001

The following model displays the predictor variables for new petty misdemeanor convictions (Table 31). The significant predictors for reduced new petty misdemeanor convictions were the succeed and age variables for standard probation, and Model 2 in HOPE probation was the age variable. In the standard probation Model 3, a previous probation or parole violation was a predictor for new petty misdemeanor convictions.

Table 31

Regression analysis of dependent variable any new petty misdemeanor severity (post-probation)

DV: New PM Severity	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
Cox & Snell R squared	.084	.034*	.125	.054	.177	.139	.081	.000***	.085	.006**	.136	.003**
Constant	-1.029	.393	-1.600	.280	-1.517	.421	1.241	.060	1.305	.062	1.053	.194
Succeed	-.652	.098	-.598	.143	-.434	.356	-.940	.007**	-.930	.008**	-.948	.010**
Age	-.031	.115	-.046	.049*	-.044	.079	-.041	.002**	-.042	.006**	-.032	.057
Gender	-.630	.252	-.396	.491	-.255	.690	.197	.516	.208	.519	.205	.548
Ethnicity	.041	.787	.050	.749	-.005	.979	.005	.996	.004	.966	-.023	.839
Education	.010	.952	-.021	.906	-.016	.947	.075	.509	.067	.589	.046	.759
Employment	.252	.055	.229	.091	.218	.156	-.153	.014*	-.142	.028*	-.111	.142
Criminal history scale			.108	.285	-.029	.843			.010	.883	-.166	.062
Family/Marital scale			-.186	.329	-.283	.186			.034	.780	.105	.441
Companions scale			-.011	.946	x	x			.045	.659	x	x
Alcohol/Drug scale			.102	.412	x	x			-.036	.587	x	x
Emotional/Personal scale			.241	.122	.344	.059			-.047	.638	-.079	.454
Attitude/Orientation scale			.113	.494	.121	.532			-.062	.549	-.087	.453
Financial scale					-.561	.106					-.111	.598
Leisure/Recreation scale					.061	.867					.010	.965
Probation/Parole susp (9)					1.044	.119					1.074	.004**
Suspend/Expelled sch (17)					.369	.581					.479	.151
3+ address change (28)					.785	.143					-.275	.385
Some crim friends (34)					-.546	.335					-.176	.588
Few non-crim acquain (35)					.058	.908					.455	.105
Prior alcohol prob (37)					.644	.287					.161	.634
Prior drug prob (38)					.371	.762					.000	.999
Current alcohol prob (39)					-.232	.668					-.575	.160
Current drug prob (40)					-.052	.956					-.903	.083
A/D law violation (41)					.202	.782					.823	.062
A/D other clinical (45)					.251	.701					.698	.208

*p<.05; **p<=.01;***p< =.001

Finally a weighted severity scale was created using the formula: weighted score = (felony B amount x 4) + (felony C amount x 3) + (misdemeanor amount x 2) + (petty misdemeanor x 1) for each probationer (Table 32). The significant predictor variables in the standard models were succeed, age and gender. In HOPE probation Models 1 and 2 were significant in succeed and age; Model 3 was significant in succeed only. In standard probation, having few non-criminal acquaintances was significant in Model 3, which increases the weighted severity; prior alcohol problem was not a good predictor for increases in weighted severity score.

Table 32

Regression analysis of dependent variable new weighted severity (post-probation)

DV: New Weighted Severity	HOPE						Standard					
	Model 1	*p*	Model 2	*p*	Model 3	*p*	Model 1	*p*	Model 2	*p*	Model 3	*p*
R squared	.126	.002**	.139	.036*	.177	.229	.125	.000***	.162	.000***	.205	.000***
Constant	3.589	.049*	3.761	.083	3.102	.246	8.450	.000***	7.508	.000***	7.319	.000***
Succeed	-1.922	.003**	-1.935	.004**	-1.539	.035*	-3.170	.000***	-3.182	.000***	-3.102	.000***
Age	-.071	.019**	-.075	.033*	-.067	.074	-.113	.000***	-.112	.001**	-.100	.004**
Gender	.811	.310	.956	.258	.992	.282	-.153	.825	.529	.471	.269	.718
Ethnicity	.190	.430	.179	.465	.048	.860	-.129	.575	-.130	.572	-.191	.411
Education	.257	.335	.252	.359	.056	.881	.310	.230	.278	.311	.245	.438
Employment	.141	.429	.141	.443	.039	.853	-.045	.759	-.067	.657	-.095	.570
Criminal history scale			-.028	.855	-.238	.272			.121	.400	.016	.931
Family/Marital scale			-.156	.608	-.144	.667			-.446	.106	-.227	.426
Companions scale			-.133	.613	x	x			.592	.011*	x	x
Alcohol/Drug scale			.037	.841	x	x			.020	.895	x	x
Emotional/Personal scale			.256	.291	.258	.345			-.374	.091	-.303	.173
Attitude/Orientation scale			.183	.475	.122	.681			-.046	.837	-.020	.933
Financial scale					.068	.894					-.238	.599
Leisure/Recreation scale					.320	.563					.530	.281
Probation/Parole susp (9)					1.683	.097					.731	.356
Suspend/Expelled sch (17)					1.182	.248					.463	.519
3+ address change (28)					.273	.729					-1.331	.043*
Some crim friends (34)					-.140	.875					-.086	.901
Few non-crim acquain (35)					-.629	.408					1.945	.001**
Prior alcohol prob (37)					.118	.898					-1.728	.019*
Prior drug prob (38)					-.153	.930					.955	.387
Current alcohol prob (39)					.328	.708					.578	.493
Current drug prob (40)					.283	.846					-.601	.579
A/D law violation (41)					.497	.651					.916	.299
A/D other clinical (45)					-.562	.573					.392	.739

*p<.05; **p<=.01;***p< =.001

Chapter 6

Discussion

Probationers with a successful probation outcome were less likely to commit a new crime. All ethnic groups appeared to be evenly dispersed in standard probation's succeeded and failed groups; however, in HOPE probation, only the White ethnic group tended to not fare well in supervision. Based on the bivariate analyses results, the Pacific Islander and Others ethnic groups appeared to be more successful in HOPE probation than standard probation, while the Asian and Hawaiian ethnic groups did moderately better in HOPE probation. These differences were not statistically significant. There was an interesting trend that the only the White ethnic group did not do better in HOPE probation; the risk-taking nature of this group could be an influencing factor so that immediate sanctions did not improve this group's success rate. However, since the White ethnicity group covered a wide spectrum of cultures, it is difficult to speculate the reason why this outcome occurred. The Pacific Islander and Others ethnic groups were the most successful in HOPE probation; a possible obedient oriented attitude towards an authoritative figure or the avoidance of harsher consequences could explain why the stricter HOPE supervision resulted in more successful outcomes when compared with standard supervision.

Probationers who were suspended or expelled from high school prior to HOPE and standard probation were more likely to fail supervision; failing supervision is a significant factor for new convictions. The institution of school requires an individual to attend classes on a daily basis bases, on a stringent timetable. Rules must be followed and non-compliant behaviors are punishable through suspensions or expulsion from school. As with Hope and standard supervision, probationers are required to attend appointments as instructed. Constant failure to attend appointments would result in a bench warrant for the probationer's arrest; upon apprehension, the probationer would have a court hearing scheduled and the probability of probation revocation (failure) increases. Also, if a probationer is consistently non-compliant with the terms and conditions of probation, a court hearing would be held and the chances of probation termination increases.

Both female and male probationers did not fare well in standard probation. However, female probationers were more successful in the stricter HOPE probation based on the bivariate

analysis. This could be due to female probationers possibly being more submissive towards authority and that adherence to rules was acceptable. Regression analysis indicated that female probationers successfully completing HOPE or standard probation were less likely to incur new convictions. On the other, the male probationers were only moderately successful in HOPE probation than in standard probation, which could be due to male probationers possessing defiant and reluctant attributes. However, regression analysis showed that as the HOPE and standard male probationers aged, they were less likely to commit a new crime, which indicated a less defiant nature and an adherence to society's rules. This researcher believes that the hormonal reduction of testosterone levels could possibly be a factor to where age reduces aggressive and dominant behaviors, which increases the tendency to follow society's rules.

Alcohol and drug problems prior to the start of probation supervision were not a determining factor in the ability of probationers to succeed in HOPE or standard probation. This result was counter to the belief that alcohol and drug problems would be detrimental to supervision success. Therefore, this outcome indicated that the probationers were able to overcome their alcohol and drug problems from the services received through HOPE and standard supervision.

Probationers receiving financial support did not predict a successful or failure outcome in HOPE or standard probation. The result indicated that probationers receiving financial support at the start of probation supervision were able to successfully complete probation, as long as their financial conditions were adequate enough to survive in the local economy. In the future, probationers in both groups should be encouraged to obtain employment while in supervision and to eventually ween off of financial aid.

HOPE probationers with three or more addresses changes, which possibly indicated homelessness, were less likely to succeed in supervision. Although HOPE probationers are encouraged to obtain emergency and/or temporary shelters during probation supervision, they could be less successful than standard probation when acquiring housing becomes difficult, due to the difficulty of accessing a telephone. Telephone access is critical to be successful in HOPE probation since calling the HOPE daily hotline is essential. Not reporting to the probation office when instructed by the HOPE hotline would result in jail sanctions and continual noncompliance would result in supervision failure.

Although the LSI-R instrument's total score was not a good predictor for new convictions, the following LSI-R scales and items were significant in predicting new convictions: the alcohol/drug problem scale, the leisure/recreation scale, item #9 (probation or parole suspended), item #35 (few non-criminal acquaintances), and item #48 (past mental health treatment). Although both probation groups were successful in reducing new convictions, HOPE probationers had a higher risk at the start of probation supervision whereas standard probation did not. HOPE probationers had high LSI-R scores in employment scale, alcohol/drug problem scale, item #9 (probation or parole suspended), item #28 (three or more address changes in a year), and item #34 (some criminal friends). Even with such higher risk probationers, HOPE probation had a higher percentage of successful completion outcomes when compared with standard probation successes.

To reject the null hypothesis that probation supervision, which incorporates immediate sanctions, would not have a significant reduction in new convictions post-probation, the statistical analyses of HOPE probation showed a significant reduction in new convictions. In HOPE probation, there were significant conviction reductions in new property and new violent crime categories. In standard probation, there were significant conviction reductions in the new drug, new property, and new violent crime categories. The trends of higher successes in HOPE probation and early termination in HOPE, suggest that HOPE probation, which incorporates immediate sanctions, provides a positive impact on probation outcomes, and that immediate sanction is a positive catalyst to increase supervision compliance. HOPE probationers had a significant higher success rate than standard probationers.

Regression analyses also indicated that HOPE probationers had a significant decrease in new convictions; also regression analyses found that a successful probation outcome was the most significant predictor for reduction in new convictions. The null hypothesis that probation supervision with immediate sanctions would not have a significant reduction in new convictions post-probation is rejected. The alternative hypothesis that probation supervision with immediate sanctions would have a significant reduction in new convictions post-probation is accepted in HOPE probation. HOPE probation has been shown to be an effective method of reducing recidivism, by the means of imposing quick and appropriate sanctions for a predetermined

violation (Carns & Martin, 2011). Since the inception of HOPE probation, many courts on the other States have adopted a similar model.

Chapter 7

Research Limitations

In this study, the HOPE and standard probation models are non-equivalent groups and a comparative statistical analysis of the supervision outcomes would be fruitless. Although the HOPE's probation supervision duration is similar to the standard probation duration of five years, the HOPE probation probationers' selection criteria were LSI-R scores (risk level of recidivating) of 21 and above, and an alcohol/drug problem history. In contrast, the standard probation selection criteria had LSI-R scores from zero and above, and the standard probation probationers may or may not have a drug using history. The conviction outcomes between the two groups could be significantly different because of these different selection criteria. In short, the two groups have nonequivalent characteristics in terms of the different probation placement criteria.

Another limitation to this study is the omission of probationers who may have absconded from probation supervision. During the probationers' absence, the supervision period does not expire; in such cases, the supervision period continues until probationers either submits themselves to the proper authorities or they are rearrested on active bench warrants. After the probationers' court hearings are concluded, the supervision period could extend beyond the five year period. Absconded probationers with pending supervision outcomes were not included into this study.

A third limitation is that probationers could be rearrested and charged with a new crime, but not convicted yet. The court cases may not have concluded within the specified 2-year follow-up period of this study. It is possible that some new convictions post-probation might not have been available.

A fourth limitation would be the fidelity of the probation officers (POs), who conduct the interviews with probationers and scores the LSI-R assessment sheet, do so in a concise, methodological, and consistent manner during the presentencing investigation prior to the supervision start date. All POs attend a mandated LSI-R training at the start of employment and all POs attended the required LSI-R assessment refresher in 2014. The LSI-R reassessments are normally conducted every six-months or annually depending on departmental policies; however, due to some inconsistencies of LSI-R reassessments, no updated scores were included in this

study. The frequency of POs' appointments with the probationers vary depending on the LSI-R initial and reassessment scores, from two times per month (LSI-R scores 26+), once a month (LSI-R scores 21 to 25), once every three months (LSI-R scores 19 to 20), to once every six months (LSI-R scores 18 or below). Not following the regimented LSI-R reassessment period may skew the probationers' appointments and this may have an impact on supervision outcomes.

A fifth limitation is POs' personalities and expertise will vary amongst each other and probationers may or may not respond well to a particular style. This study's limit does not address the interactions between POs and probationers.

A sixth limitation was that multiple judges (total nine) were involved in the probationers' success and/or failure outcomes in HOPE probation during 2007 to 2012. After 2012, only two judges were assigned to HOPE probation, to address the consistency of immediate sanctions imposed (i.e., length of jail terms) with the probationers' non-compliant behavior severity.

Further research would continue to analyze the new conviction outcomes for 2015, 2016 and 2017, five-years after the post-probation period. Future research could use new comparison groups to compare all HOPE and standard groups staring supervision in 2008 up to 2015 to examine any similarities or differences in findings when compared with findings from this study.

Chapter 8

Research Implication for Social Work

In respect to the Social Work field, this research may contribute to the practice and policy of the substance abuse and criminal justice system in Hawai‘i. This study has revealed the key factors related to the probation outcomes of successes and failures. Although this study was unable to address new alcohol and drug use post-probation, the LSI-R alcohol and drug problem scale indicated that continued alcohol and drug problems increase the probability of new crimes post-probation. The use of immediate sanctions, which was originally used to help probationers decrease their alcohol/drug use and increase their alcohol/drug treatment compliance during probation, would help in post-probation to maintain an alcohol and drug free life, help increase their chance of being crime-free, and help become more productive citizens.

The use of immediate sanctions may have increased the efficiency of probation officers (POs) work hours due to the improvement of probationers' compliance. By affording more time for POs to focus on the probationers' future goals and desires, better outcomes occur when compared with POs supervision focused mainly on gaining compliance. The amount of greater successful percentage outcome of supervision utilizing immediate sanctions compared to standard probation may be an indicator of immediate sanction's benefit.

This study identified the following high-risk factors that lead to poor supervision outcomes and new crime: criminal companions, homelessness, alcohol/drug problems, poor family support, employment problems, mental health issues, and too much free time. During probation supervision, POs using motivational interviewing techniques have made a positive impact with probationers in these key identified high-risk leading areas.

An interesting finding was supervision failures in both HOPE and standard probation occurred around 2.5 years. Since this was a similar situation occurring in both groups, the ACSB may wish to investigate if a common link caused this phenomenon.

The success of immediate sanction decreases the necessity of prison terms and successful probation supervision help increase public safety by reducing new crimes. In addition, the probationers receive increased public assistance for better community integration as opposed to the limited services provided through the prison system. Avoiding costly prison sentences

through improved probation outcomes helps to better utilize the State of Hawai‘i’s limited funding resources.

Both HOPE and standard probation were successful in reducing new crimes; however, this study indicated that HOPE had a significantly higher success (completion) rate and a successful probation supervision outcome was a good predictor of reducing new crime. The ACSB may wish to study the possibility of increasing the success rate of standard probation supervision. This author noticed that ACSB constantly seeks to improve supervision successes through staff training, refresher courses, implementing evidence based practices, and measuring success rates through scientific research. Therefore, since this study’s research period began in the year 2007, future probation group studies beginning in the following years of 2008 up to 2015 are required to detect if any transformational improvements occurred that could reflect the implementation of evidence based practices.

Office of Research Compliance
Human Studies Program

UNIVERSITY of HAWAI'I® MĀNOA

MEMORANDUM
CR

March 9, 2016 **Revised March 16, 2016**

TO: Leonard Sensui
Principal Investigator
Social Welfare

FROM: Denise A. Lin-DeShetler, MPH, MA
Director

SUBJECT: CHS #22500- "A Study of Immediate Sanction Effectiveness to Reduce New Conviction Post-Probation"

Under an expedited review procedure, the research project identified above was approved for one year on March 8, 2016 by the University of Hawaii (UH) Human Studies Program. The application qualified for expedited review under CFR 46.110 and 21 CFR 56.110, Category (5).

This memorandum is your record of the Human Studies Program approval of this study. Please maintain it with your study records.

The Human Studies Program approval for this project will expire on March 7, 2017. If you expect your project to continue beyond this date, you must submit an application for renewal of this Human Studies Program approval. The Human Studies Program approval must be maintained for the entire term of your project.

If, during the course of your project, you intend to make changes to this study, you must obtain approval from the Human Studies Program prior to implementing any changes. If an Unanticipated Problem occurs during the course of the study, you must notify the Human Studies Program within 24 hours of knowledge of the problem. A formal report must be submitted to the Human Studies Program within 10 days. The definition of "Unanticipated Problem" may be found at: http://hawaii.edu/irb/download/documents/SOPP_101_UP_Reporting.pdf, and the report form may be downloaded here: http://hawaii.edu/irb/download/forms/App_UP_Report.doc.

You are required to maintain complete records pertaining to the use of humans as participants in your research. This includes all information or materials conveyed to and received from participants as well as signed consent forms, data, analyses, and results. These records must be maintained for at least three years following project completion or termination, and they are subject to inspection and review by the Human Studies Program and other authorized agencies.

1960 East-West Road
Biomedical Sciences Building B104
Honolulu, Hawai'i 96822
Telephone: (808) 956-5007
Fax: (808) 956-8683

Please notify this office when your project is complete. Upon notification, we will close our files pertaining to your project. Reactivation of the Human Studies Program approval will require a new Human Studies Program application.

Please contact this office if you have any questions or require assistance. We appreciate your cooperation, and wish you success with your research.

Appendix A

Ethnic Group Categories

Ethnic Group	Frequency	Percent	Cumulated Percent
White	**55**	**11.7**	11.7
Asian			
Chinese	0	0.0	11.7
Filipino	36	7.7	19.4
Korean	4	0.9	20.2
Japanese	13	2.8	23.0
Asian/Caucasian	12	2.6	25.5
Asian/Other	26	5.5	31.1
Total Asian	**91**	**19.4**	
Hawaiian/Part Hawaiian	**208**	**44.3**	75.3
Pacific Islander			
Samoan	34	7.2	82.6
Tongan	0	0.0	82.6
Micronesian	3	0.6	83.2
Pacific Islander/Asian	4	0.9	84.0
Pacific Islander/Caucasian	1	0.2	84.3
Total Pacific Islander	**42**	**8.9**	
Other			
Black	22	4.7	88.9
Hispanic	5	1.1	90.0
Puerto Rican	2	0.4	90.4
Portuguese	1	0.2	90.6
Mixed	23	4.9	95.5
All Others	21	4.5	100.0
Total Other	**74**	**15.7**	
Total	**470**	**100.0**	

Appendix B

LEVEL OF SUPERVISION INVENTORY

Full Name:_____ Date of Birth:_____/_____/_____ Gender☐ M ☐ F

Race: ☐W☐ B☐ H ☐Other (specify)_____ INITIAL LSI☐ Yes ☐ No Reassessment No. _____

Officer Name:_____ Date Completed:_____/_____/_____

CRIMINAL HISTORY

1. _____ Any prior convictions, adult/number ☐
2. _____ Two or more prior convictions
3. _____ Three or more prior convictions
4. _____ Three or more present offenses/number☐
5. _____ Arrested under age 16
6. _____ Ever incarcerated upon conviction
7. _____ Escape history - institution
8. _____ Ever punished for institutional misconduct/number ☐
9. _____ Charge laid or probation/parole suspended during prior community supervision
10. _____ Record of assault/violence

SUBTOTAL SCORE _____/10 = ( )

EDUCATION/EMPLOYMENT

When in labor market:

11. _____ Currently unemployed
12. _____ Frequently unemployed
13. _____ Never employed for a full year
14. _____ Ever fired

School or when in school:

15. _____ Less than regular grade 10
16. _____ Less than regular grade 12
17. _____ Suspended or expelled at least once

Homemaker, pensioner: 18 only
School, work, unemployed: 18, 19, 20

18. _____ Participation/Performance - 0 1 2 3 +
19. _____ Peer interactions - 0 1 2 3 +
20. _____ Authority Interactions - 0 1 2 3 +

SUBTOTAL SCORE _____/10 = ( )

FINANCIAL

21. _____ Problems - 0 1 2 3 +
22. _____ Reliance upon social assistance

SUBTOTAL SCORE _____/ 2 = ( )

FAMILY/MARITAL

23. _____ Dissatisfaction with marital or equivalent situation - 0 1 2 3 +
24. _____ Non rewarding, parental - 0 1 2 3 +
25. _____ Non rewarding, other - 0 1 2 3 +
26. _____ Criminal family/spouse

SUBTOTAL SCORE _____/ 4 = ( )

ACCOMMODATION

27. _____ Unsatisfactory - 0 1 2 3 +
28. _____ 3 or more address changes last year/number ☐
29. _____ High crime neighborhood

SUBTOTAL SCORE _____/ 3 = ( )

LEISURE/RECREATION

30. _____ No recent participation in organized activity
31. _____ Could make better use of time - 0 1 2 3 +

SUBTOTAL SCORE _____/2 = ( )

COMPANIONS

32. _____ A social isolate
33. _____ Some criminal acquaintances
34. _____ Some criminal friends
35. _____ Few anti-criminal acquaintances
36. _____ Few anti-criminal friends

SUBTOTAL SCORE _____/ 5 = ( )

ALCOHOL/DRUG PROBLEMS

37. _____ Alcohol problem, ever
38. _____ Drug problem, ever
39. _____ Alcohol problem, currently - 0 1 2 3 +
40. _____ Drug problem, currently - 0 1 2 3 +

Specify drug:_____

41. _____ Law violation
42. _____ Marital/family
43. _____ School/work
44. _____ Medical
45. _____ Other clinical indicators

Specify:_____

SUBTOTAL SCORE _____/ 9 = ( )

EMOTIONAL/PERSONAL

46. _____ Moderate interference
47. _____ Severe interference
48. _____ Mental health treatment, past
49. _____ Mental health treatment, current
50. _____ Psychological assessment indicated

Area:_____

SUBTOTAL SCORE _____/ 5 = ( )

ATTITUDE/ORIENTATION

51. _____ Supportive of crime - 0 1 2 3 +
52. _____ Unfavorable attitude toward convention - 0 1 2 3 +
53. _____ Poor attitude toward sentence/conviction
54. _____ Poor attitude toward supervision

SUBTOTAL SCORE _____/ 4 = ( )

TOTAL SCORE ☐ **RATER BOX TOTAL** ☐

Current Offense(s):_____

_____

_____

_____

Age at 1st Arrest: _____

TREATMENT LEVEL RECOMMENDED ☐

Appendix C

Types of Drug, Property, Violent, and Other Crimes

Drug Crimes	**Property Crimes**
Promoting a Dangerous Drug	Theft, Larceny, Shoplifting
Promoting a Detrimental Drug	Burglary, Burglary Tools
Promoting a Harmful Drug	Trespassing
Unlawful Use of Drug Paraphernalia	Forgery, Identification Theft
Operating Vehicle Under the Influence	Unauthorized Control of Propelled Vehicle
Liquor in Public	Unauthorized Entry into Motor Vehicle
Methamphetamine Trafficking	Unauthorized Possession of Personal Info
Refusal to Submit	Promoting Prison Contraband

Appendix C

Types of Drug, Property, Violent, and Other Crimes (continued)

Violent Crimes	**Other Crimes**
Murder, Robbery, Arson	Open Lewdness
Assault, Sexual Assault	Obey Police Officer, Failure to Disperse
Terroristic Threatening, Harassment	Aerial Fireworks
Kidnapping	Driving Motor Vehicle Without License
Criminal Property Damage	Reckless Driving, Inattention to Driving
Firearms, Electronic Guns, Replica Guns	Prostitution, Escape
Accident Involving Bodily Injury	Park Rules and Regulations
Disorderly Conduct	Massage License Required
Abuse of Family or Household Members	Obstructing Government Operation, Hindering
Resisting Arrest	Tampering with Physical Evidence
Violation of Restraining Order	Criminal Littering

References

Aukerman, R.G., McGarry, P., & Consesus Panel Co-Chair. (1994). *Combining substance abuse treatment with intermediate sanctions for adults in the criminal justice system*. (DHHS publication number (MSA) 94-3004). Washington, DC: U.S. Government Printing Office.

Baum, W.B. (2012). Rethinking reinforcement. *Journal of the Experimental Analysis of Behavior, 97(1),* 1287-1299.

Bejerot, N. (1980). Addiction to pleasure: A biological and social-psychological theory of addiction. In D.J. Lettieri, M. Sayers, & H.W. Pearson (Eds.), Theories of drug abuse: Selected contemporary perspectives (pp. 246-255). Rockville, MD: National Institute on Drug Abuse.

Belenko, S. (2002). The challenges of conducting research in drug treatment court settings. *Substance Use & Misuse, 37(12),* 1635-1664.

Bonta, J. (1996). *Choosing correctional options that work: Defining the demand and evaluating the suppy.* Thousand Oaks, CA: Sage Publications, Inc.

Bonta, J., Bogue, B., Crowley, M., & Motiuk, L. (2001). *Implementing offender classification systems: Lessons learned.* New York: John Wiley & Sons, LTD.

Byrne, J.M., Lurigio, A.J., & Petersilia, J. (Eds.). (1992). *Smart Sentencing: The Emergence of Intermediate Sanctions.* Thousand Oaks, CA: Sage Publications, Inc.

Carns, T.W., & Martin, S. (2011). Anchorage PACE probation accountability with certain enforcement: A preliminary evaluation of the anchorage pilot PACE project. University of Alaska Anchorage, Justice Center.

Carson, E.A. (2014). *Prisoners in 2013.* (NCJ publication number 247282). Washington DC: Bureau of Justice Statistics

Chiesa, M. (1992). Radical behaviorism and scientific frameworks: From mechanistic to relational accounts. *American Psychologist, 47(11),* 1287-1299.

Cohen, J.B., Dickow, A., Horner, K., Zweben, J.E., Balabis, J., Vandersloot, D., & Reiber, C. (2003). Abuse and violence history of men and women in treatment for methamphetamine dependence. *The American Journal on Addiction, 12(5),* 377-385.

Cole, M.R. (1990). Operant hoarding: a new paradigm for the study of self-control. *Journal of the Experimental Analysis of Behavior, 53,* 247-261.

Collins, J.J., & Allison, M. (1983). Legal Coercion and Retention in Drug Abuse Treatment. *Psychiatric Services 34(12).*

Davidson, J. (2005). *Assessing the risk of recidivism: Testing the validity of the level of service inventory.* Retrieved on December 5, 2015 from http://icis.hawaii.gov/wp-content/uploads/2013/07/lsir_valid_report.pdf

Domjan, M. (1998). *The principles of learning and behavior (4th ed.).* Belmont, CA: Thomson Brooks/Cole Publishing Co.

Farrar-Owens, M. (2013). Immediate sanction probation pilot program. Presented to the Virginia House Appropriations Committee on September 16, 2013.

Frank, M.J., Seeberger, L.C., & O'Reilly, R.C. (2004). By carrot or by stick: Cognitive reinforcement learning in parkinsonism. *Science, 306,* 1940-1943.

Gardnera, R.A., & Gardnera, B.T. (1988). Feedforward compared to feedbackward: An ethological alternative to the law of effect. *Behavioral and Brain Sciences, 11(03),* 429-447.

Goodwin, C. L. (2004). *The poisoning of paradise: crystal methamphetamine in Hawai'i.* Proceedings before the House Government Reform Subcommittee on Criminal justice in Washington, DC. Retrieved on March 7, 2011 from http://www.fbi.gov/news/testimony/the-poisoning-of-paradise-crystal-methamphetamine-in-Hawai'i.

Gottfredson, M.R. (2011). Sanctions, situations, and agency in control theories of crime. *European Journal of Criminology, 8(2),* 128-143.

Guydish, J., Chan, M., Bostrom, A., Jessup, M.A., Davis, T.B., & Marsh, C. (2011). A randomized trial of probation case management for drug-involved women offenders. *Crime & Delinquency, 57(2),* 167-198.

Hall, W. (1997). *The role of legal coercion in the treatment of offenders with alcohol and heroin problems.* National Drug and Alcohol Research Centre: University of New South Wales. ISBN No. 0 947229 72 8.

Harrell, A. (1998). *Drug Courts and the Role of Graduated Sanctions*. (NCJRS publication number FS 000219). Washington, DC: National Institute of Justice.

Hawai‘i Meth Project. (2009). *Hawai‘i meth project releases results of first-ever meth use & attitudes survey.* Retrieved on March 7, 2011 from http://www.Hawai‘imethproject.org /Research.

Hawken, A. (2010a). The message from Hawai‘i: HOPE for probation. *Perspectives.* 36-49.

Hawken, A. (2010b). Behavioral triage: A new model for identifying and treating substance-abusing offenders. *Journal of Drug Policy Analysis, 3(1),* 1941-2851.

Hawken, A. & Kleiman, M. (2009). Managing drug involved probationers with swift and certain sanctions: Evaluating Hawai‘i’s HOPE. Submitted to the National Institute of Justice.

International Business Machines (IBM). (2015). *SPSS statistical standard grad pack shrinkwrap version 23.0.* Ireland: IBM Corporation.

Inaba, D.S. & Cohen, W. (2007). *Uppers, downers, all arounders: physical and mental effects of psychoactive drugs* . Medford, OR: CNS Productions, Inc.

Johnson, D.T., Davidson, J.T., & Perrone, P. (2011). *Hawaii’s imprisonment policy and the performance of parolees who were incarcerated in-state and on the mainland*. Retrieved on February 25, 2016 from http://ag.hawaii.gov/cpja/files/2013/01/AH-UH-Mainland-Prison-Study-2011.pdf.

Johnson, J.L. & Leff, M. (1999). Children of substance abusers: Overview of research findings. *Pediatrics,103,* 1085-1099.

Jones, S. (2006). *Criminology (third edition)*. New York: Oxford University Press.

Kleiman, M.A.R. (2001). Controlling drug use and crime with testing, sanctions, and treatment. In P.B. Heymann, & W.N. Brownsberger (Eds.), Drug addiction and drug policy: The struggle to control dependence (pp. 168-192). Harvard University Press.

Lawrence, N. (2016). *Personal communication.* Justice Reintegration Initiative (JRI) Coordinator. Honolulu, HI: Department of Public Safety.

Lowenkamp, C., & Latessa, E. (2004). *Understanding the risk principle: How and why correctional interventions: can harm low-risk offenders.* Submitted to the National Institute of Corrections.

Locurto, C.M., Terrace, H.S., & Gibbon, J. (1981). *Autoshaping and conditioning theory.* New York: Academic Press.

Marlowe, D.B. (2007). Strategies for Administering Rewards and Sanctions. In J.E. Lessenger, & G.F. Roper (Eds.) Drug Courts (pp.317-336). New York: Springer.

McKetin, R., Lubman, D.I., Najman, J.M., Dawe, S., Butterworth, P., & Baker, A.L. (2014). Does Methamphetamine use increase violent behavior? Evidence from a prospective longitudinal study. *Addition, 109(5),* 798-806.

McSweeney, T., Stevens, A., Hunt, N., & Turnbull, P.J. (2008). Drug testing and court review hearings: Uses and limitations. *Probation Journal, 55(1).* 39-53.

Miller, P.A. & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing antisocial behavior. *Psychological Bulletin, 103(3),* 324-344.

Miltenberger, R.G. (2008). *Behavior modification: Principles and procedures.* Belmont, CA: Thomson Wadsworth.

Narconon Hawai‘i. (2010). *Methamphetamine addiction.* Retrieved on March 7, 2011 from http:// www.narcononHawai‘i.org/content.aspx?pid=10.

National Institute of Justice [NIJ]. (2010). *Recidivism*. Office of Justice Programs. Retrieved on May 4, 2014, from http://www.nij.gov/topics/corrections/recidivism/Pages/ welcome.aspx#statistics.

National Institute on Drug Abuse (NIDA). (2006). *Methamphetamine abuse and addiction*. (NIH publication number 06-4210). Washington, DC: Author.

National Institute on Drug Abuse (NIDA). (2010). *Drugs, brains, and behavior: The science of addiction*. (NIH publication number 10-5605). Washington, DC: Author.

National Institute on Drug Abuse (NIDA). (2013). *What are the long-term effects of methamphetamine abuse?* Retrieved on March 28, 2016 from https:// www.drugabuse.gov/publications/research-reports/methamphetamine/what-are-long-term-effects-methamphetamine-abuse.

Neuringer, A. (2002). Operant variability: Evidence, functions, and theory. *Psychonomic Bulletin & Review, 9(4),* 672-705.

Pelloux, Y., Everitt, B.J., & Dickinson, A. (2007). Compulsive drug seeking by rats under punishment: Effects of drug taking history. *Psychopharmacology, 194*,127–137.

Petersilia, J. (2001). When prisoners return to communities. *Federal Probation, 65(1),* 3-8.

Pierce, W.D., & Cheney, C.D. (2004). *Behavior analysis and learning*, New York: Psychology Press.

Price, K.L., Saladin, M.E., Baker, N.L., Tolliver, B.K., DeSantis, S.M., McRae-Clark, A.L., & Brady, K.T. (2010). Extinction of drug cue reactivity in methamphetamine-dependent individuals. *Behaviour Research and Therapy 48,* 860-865.

Rabinowitz, M., & Lurigio, A. (2009). *A century of losing battles: the costly and ill-advised war on drugs.* Retrieved on April 12, 2011 from http://www.allacademic.com/one/www/www/index.php?click_key=1.

Rhodes, W., Dyous, C., Kling, R., Hunt, D., & Luallen, J. (2012). *Recidivism of offenders on federal community supervision.* Cambridge, MA: Abt Associates Inc.

Skinner, B.F. (1938). *The behavior of organisms: An experimental analysis.* New York: Appleton Century Crofts.

Staddon, J.E.R., & Cerutti, D.T. (2003). Operant conditioning. *Annual Review of Psychology, (54),* 115-144.

Tonry, M., & Lynch, M. (1996). Intermediate Sanctions. *Crime and Justice, 20,* 99-144.

Tucker, M., Sigafoos, J., & Bushell, H. (1998). Use of noncontingent reinforcement in the treatment of challenging behavior: A review and clinical guide. *Behavior Modification, 22(4),* 529-547.

Turner, S., Petersilia, J., & Deschenes, E.P. (1992). Evaluating intensive supervision probation/parole (ISP) for drug offenders. *Crime & Delinquency, 38(4),* 539-556.

Wenzel, S.L., Green, H.D., Tucker, J.S., Golinelli, D., Kennedy, D.P., Ryan, G., & Zhou, A. (2009). The social context of homeless women's alcohol and drug use. *Drug and Alcohol Dependence, 105,* 16-23.