IOWA STATE UNIVERSITY
Digital Repository

2017

The debt prison: The effect of court-ordered monetary sanctions on recidivism

Jennifer Jewel Tostlebe
Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/etd

Part of the Criminology Commons, and the Criminology and Criminal Justice Commons

The debt prison: The effect of court-ordered monetary sanctions on recidivism

by

Jennifer J. Tostlebe

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Sociology

Program of Study Committee:
Matt DeLisi, Major Professor
Monic Behnken
Kyle Burgason

The student author and the program of study committee are solely responsible for the content of this thesis. The Graduate College will ensure this thesis is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University

Ames, Iowa

2017

DEDICATION

To all those who have ever felt like giving up…

Don't succumb.

You are capable of more than you know.

TABLE OF CONTENTS

v

LIST OF FIGURES

Page

vi

LIST OF TABLES

Page

ACKNOWLEDGMENTS

This thesis came to life with support from various sources, none of whom I could have completed this research without. First, I would like to thank my committee chair, Dr. DeLisi, and my committee members, Dr. Behnken and Dr. Burgason, for their insight, guidance, and unending support throughout my time here at Iowa State University. Second, I would also like to thank my friends, colleagues, and the department faculty and staff for making my time at ISU a wonderful experience. Third, I want to extend a big thank you to Lettie Prell and all others at the Iowa Department of Corrections who assisted in obtaining the data for this thesis.

In addition, I would like to thank Jonas for being such a fantastic friend. Taylor, thank you for deciding to come to ISU and for being my confidant throughout these last three semesters. As you mentioned, our procrastination, panic attacks, and day long text messaging finally paid off! Thank you to my family for encouraging me to chase my dreams, whatever they may be, and for always being there with words of inspiration, wine (and coffee and beer) and cheese. Nathan and Bailey, may you always remember the importance of never giving up and working for what you want.

Lastly, to Jamie. Thank you for loving me fiercely, for supporting my biggest dreams, and for keeping me laughing.

ABSTRACT

The use of monetary sanctions as part of the punishment process has been a part of the American criminal justice system since colonization. However, there has been little empirical research investigating the effect of financial penalties incurred by criminal offenders and the extent to which such sanctions relate to the likelihood of recidivism. By applying General Strain Theory, this study explores how monetary sanctions, along with demographics and prior offense type, affect the recidivism rates of persons who were incarcerated. Utilizing a sample of 729 first-time prisoners released from Iowa prisons and then followed for three years, secondary data from the Iowa Department of Corrections is paired with self-collected monetary sanction data from Iowa Courts Online to test the hypothesis that court-ordered monetary sanctions affect the recidivism of first-time prisoners in Iowa. Logistic regression analyses suggest there is not a statistically significant association between monetary sanctions and recidivism. However, ROC curve analysis suggests there is an association between monetary sanctions and recidivism. The results also suggest higher total sanction amount decreases time to recidivism, while higher restitution amount increases time to recidivism.

CHAPTER I

INTRODUCTION

Statement of the Problem

Since the 1970's, the United States correctional system population has

dramatically increased. Today there are more than seven million people incarcerated, on

parole or probation, or under some other form of state supervision (Gottschalk 2011). In

1994, 272,111 released prisoners from fifteen states were tracked for 3 years after their

release. Within those three years, 67.5 percent of the released prisoners were rearrested

(Langan and Levin 2002). More recently in 2005, the United States Department of

Justice's Bureau of Justice Statistics studied the recidivism rates of thirty states, including

Iowa. They found that 67.8 percent of prisoners released were arrested within three years

(Durose, Cooper, and Snyder 2014).

Per the National Institute of Justice, recidivism is measured by criminal acts that

result in re-arrest, reconviction, or return to prison with or without a new sentence during

a three-year period following the prisoner's release (National Institute of Justice 2014).

For purposes of this study, labeling an individual a recidivist involves a measure of

'return to prison' during a three-year period following release. By observing this

measure, one study found 49.7 percent of prisoners return to prison within three years,

due to either a technical violation or a new conviction (Durose et al. 2014). An alternative

study found 67.5 percent of prisoners returned to prison within three years of release due

to a technical violation or a new conviction (Langan and Levin 2002). These statistics

support the notion that a significant portion of offenders released from prison go on to commit additional crimes, which is a concern of the criminal justice system.

In Iowa, 96 percent of inmates will leave prison (Iowa Department of Corrections n.d.). Recidivism rates in Iowa are nationally low. In December 2016, the return to prison rate was 34.2 percent (Iowa Department of Corrections 2017). Relevant to the present study's period, the 2015 fiscal year saw a 31.9 percent return to prison recidivism rate (Iowa Department of Corrections 2016). However, while recidivism rates in Iowa are relatively low, repeat offending is still a problem undermining the retributive and deterrent foundations of the criminal justice system and shows that rehabilitation, another cornerstone of the criminal justice system, is failing. This problem begs the question: What can be done to prevent offenders from recidivating?

Many responses have included eliminating harsh mandatory-length sentencing laws, making full employment a domestic policy goal and providing incentives to employers who hire offenders, establishing prison education programs and incentivizing inmate participation, supporting community policing efforts, and increasing community funding in high prison population communities. But, little scholarly attention has been given to the impact of increasing amounts of monetary sanctions imposed on recidivism.

The monetary sanction variable in Iowa includes costs, fines, restitution, and surcharges that are imposed by the courts and other criminal justice agencies on persons accused and/or convicted of crimes. Each monetary sanction has a unique purpose. Costs are payments to reimburse the state and local jurisdictions for the costs of the criminal justice procedure. Fines are monetary penalties which can be either mandatory or by the discretion of the judge and are imposed to act as punishment for committing a specific

crime. Restitution is a court-ordered payment some offenders must pay to their victim(s) to compensate them for their loss and/or injury. Lastly, surcharges are add-on amounts implemented to generate revenue for goals not necessarily related to the criminal justice procedure.

The principal argument made by the criminal justice system is that court-ordered monetary sanctions act as rehabilitation, retribution, and a deterrent to prevent recidivism (Hillsman and Green 1992; Atkinson 2015). However, apart from restitution, the research conducted on this topic indicates differently. Researchers are concluding that costs, fines, and surcharges do not act as rehabilitation, retribution, or a deterrent, but instead solely contribute to an ever-growing amount of legal debt.

Purpose of the Study

The purpose of this thesis is to test the basic premise of general strain theory as contextualized by Agnew (1992) that strains or stressors increase the likelihood of negative emotions like anger and frustration. These emotions then create pressure for corrective action, and crime is one possible response. This study explores how court-ordered monetary sanctions, along with demographics and initial prison conviction charge, affect the recidivism rates of persons who were incarcerated. This thesis utilizes a dataset consisting of 729 first-time prisoners released from Iowa prisons between July 1, 2011 and June 30, 2012 who were then followed until the 2015 fiscal year. The data for this study was obtained through the Iowa Department of Corrections and Iowa Courts Online and has been approved by the Iowa State University Institutional Review Board.

Previous theorizing and research on monetary sanctions focuses on debtor's prisons, frequency and magnitude of legal debt, how legal debt contributes to the accumulation of the disadvantaged, how legal debt increases the likelihood of ongoing criminal activity/charts a path back to prison, the impact of socio-cultural factors on monetary sanction imposition, whether recidivism is more likely with fines or community service, and if offenders view monetary sanctions as an effective form of punishment. Thorough analysis of previous research has identified a gap in the literature. While scholars have acknowledged that monetary sanctions may lead to recidivism and that paying restitution may lead to a decrease in recidivism, I am unaware of any study directly comparing the amount of legal debt to recidivism rate. This study is an attempt to bridge that gap.

This study adds to the growing body of knowledge that exists regarding the recidivism of criminal offenders and supports future research related to court-ordered monetary sanctions. This study helps identify areas of concern that need to be addressed when an offender is sentenced for a crime and throughout the collection process. It aims to aid in the prevention of future criminal behavior and recidivism, while supporting the restorative justice philosophy. Because this study analyzes and explains recidivism beyond what is known to affect the phenomenon, this study is useful to legislators, all personnel in the criminal justice system, scholars, and to the community.

This research is separated into several chapters. Chapter two discusses the literature that exists about the criminal justice system, recidivism, monetary sanctions, and general strain theory. This chapter will look specifically at the punishment philosophies: incapacitation, deterrence, retribution, rehabilitation, and restoration;

recidivism and factors that influence the phenomenon: demographics, criminal history,

the LSI-R, and socioeconomic status; court-ordered monetary sanctions, offenders'

ability to pay, and the collection process; and lastly, court-ordered monetary sanctions

and decision-making are discussed within a general strain theoretical framework. Chapter

three discusses the research design and methodology of this project. This chapter presents

the research hypotheses, discusses the data set, and presents the research design and

analytical plan. Chapter four presents the results. Chapter five presents a discussion of the

results presented in chapter four. Finally, Chapter six discusses limitations of the

research, provides suggestions for future research, and presents a conclusion.

CHAPTER II

LITERATURE REVIEW

Chapter two is a presentation of the literature that exists on a variety of aspects of the American criminal justice system. The information presented in this chapter is particularly oriented towards topics of punishment philosophies, recidivism, court-ordered monetary sanctions, and general strain theory. The five punishment philosophies are discussed: rehabilitation, incapacitation, deterrence, retribution, and restoration. The topic of recidivism is discussed in relation to previous studies of recidivism and factors that influence the phenomenon: demographics, criminal history, the LSI-R, and socioeconomic status. Court-ordered monetary sanctions are discussed in relation to their structure in Iowa, offenders' ability to pay, and the collection process. Finally, general strain theory is examined in relation to court-ordered monetary sanctions, poverty, and decision-making. Previous studies on court-ordered monetary sanctions are dispersed throughout.

The Criminal Justice System

The United States has the world's highest incarceration rate and locks up more people than any other country. At least in theory, penal policies are aimed at incapacitation, deterrence, rehabilitation, retribution, and restoration. Support for these different philosophies of crime prevention in the criminal justice system has changed dramatically in the past forty years.

Initially, the criminal justice system's main punishment philosophy was rehabilitation. Rehabilitation aims at restoring an offender to being a productive, law-abiding citizen in society. In the 1970s, the strong emphasis towards rehabilitation gave way to an increased focus on incapacitation, deterrence, and a "tough on crime" mindset. Incapacitation refers to the use of confinement to prevent an offender from further victimizing members of society. Today, incapacitation is still the primary justification for imprisonment (Zimring and Hawkins 1995) and the new penology, a set of criminal justice policies that focus on risk management and control of groups of offenders rather than helping them, is flooding the system.

Three other punishment philosophies exist: retribution, deterrence, and restoration. Imprisonment, a method of incapacitation, is also the most common method of retribution, which is the payment of debt to society to amend for one's crimes. Retribution firmly seeks to match the severity of the punishment to the severity of the criminal offense. Court-ordered monetary sanctions are one of many forms of retribution. In theory, the more severe the criminal offense, the more expensive the court-ordered fine will be.

On the opposite side of the punishment spectrum lies deterrence. Deterrence aims to discourage crime by using threats of severe punishment. If the correctional system is tough enough, people will be dissuaded from a lifestyle of crime for fear of the punishment. In theory, if court-ordered monetary sanction amounts are high enough, individuals will not commit crime in fear of being sentenced with large amounts of debt. However, because members of the disadvantaged strata who are burdened by strong social pressures commit most crimes (Rusche and Dinwiddie 1978), it is difficult to

create a humane deterrent. This is because the standard of living within prisons must appear even worse than the strata's present living conditions. This is difficult because, as stated by Rusche and Dinwiddie (1978:4):

> When we get down to the poorest and most oppressed of our population we find the condition of their life so wretched that it would be impossible to conduct a prison humanely without making the lot of the criminal more eligible than that of many free citizens.

Per Rusche and Kirchheimer (1939:176), "We can safely conclude, therefore, that the application of fines has its natural limits in the material conditions of the lower strata of the population." Critelli and Crawford (1980) suggested monetary sanctions are not a useful deterrent because offenders view monetary sanctions as an incidental, indirect form of punishment (DeLisi and Conis 2013).

The newest punishment philosophy is restoration. It emphasizes repairing the harm caused by crime. It is accomplished through mediation-style processes involving offenders, victims, and community residents. Restitution is one example of restorative justice and is theorized to restore the victim and offender, lowering the recidivism rate (Ervin and Schneider 1990; Ruback 2002).

Recidivism

Recidivism is one of the most fundamental concepts in criminal justice and refers to a person's relapse into criminal behavior, often after the person undergoes punishment for a previous crime. Beck and Shipley (1989:2) define recidivism as, "estimates of the percentages of released prisoners who commit another offense." Various measures of

recidivism and length of follow-up period provide different estimates of the recidivism rate. In Iowa, the most common measure includes individuals who have returned to prison within three years of release. This measure provides a recidivism rate of 31.9 percent in the 2015 fiscal year, which describes the recidivism for offenders leaving prison in the 2012 fiscal (Iowa Department of Corrections 2016). A vigilant review of the literature on recidivism indicates that the same risk factors predict most types of criminal recidivism when released from prison. These high-risk variables include demographics, criminal history, LSI-R score, and socioeconomic status. Discussion of the variables pertinent to this study follows.

Demographics

The United States is home to one of the most racially and ethnically diverse populations on the planet. As a result, differences in the distribution of crime are affected by demographic characteristics, especially age, sex, and race. Demographic characteristics not only factor in the risk of committing crime initially, but they also play a significant part in an offender's risk of recidivism.

Recidivism has an inverse relationship with age. May, Sharma, and Stewart (2008:4) found "the reoffending rate was highest (70%) for those aged from 18 to 20, and lowest (36%) for those aged 40 and over." This relationship indicates that recidivism decreases as age increases. Langan and Levin (2002) concluded that on average, offenders in younger age groups when released from prison have higher recidivism rates. In Iowa, the 2015 fiscal year saw a concurring pattern with recidivism decreasing as age increased (Iowa Department of Corrections 2016).

There is a great disparity in criminal behavior and the incarcerated population between genders. Women recidivate at a lower rate than men. Langan and Levin (2002) agree that males are more likely to recidivate than females, concluding males return to prison at a rate of 53 percent compared to females at 39.4 percent. According to the Iowa Department of Corrections (2016), the 2015 fiscal year saw higher rates of recidivism for males (32.4%) than for females (27.8%).

Recent attention has been devoted to the racial composition of the United States' prison population, particularly with the publication of Michelle Alexander's *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. In her book, Alexander (2016:2) argues, "We have not ended racial caste in America; we have merely redesigned it." Blumestein (1982:1259) stated, "one of the most distressing and troublesome aspects of the operation of the criminal justice system in the United States is the severe disproportionality between blacks and whites in the composition of the prison populations." Research has also been devoted to analyzing the racial disparities in recidivism rates. Langan and Levin (2002) found blacks recidivated at a 54.2 percent rate and whites recidivated at a 49.9 percent rate. In the past, Iowa saw a large disparity in the recidivism rates between white and black offenders, black offenders recidivating at much higher rates. However, in the past four years, the recidivism rates for black offenders have declined. The 2015 fiscal year found blacks recidivated at a 32.4 percent rate and whites recidivated at a 32.3 percent rate (Iowa Department of Corrections 2016).

Criminal history

Most first-time prisoners released from prison are already recidivists, defined as having been convicted of crimes previously and undergoing sanctions or treatment programs to prevent future crime. Having an established criminal history labels an offender a repeat offender and increases their individual risk for future criminal activity. According to May et al. (2008:4), "the likelihood of reoffending increases with the number of previous convictions."

Recidivism rates also differ on the criminal history offense type. Durose et al. (2014) found the highest rates of recidivism among property offenders (36.4% after one year; 61.8% after five years), followed by drug offenders (28.1% after one year; 53.3% after five years). During Iowa's 2015 fiscal year, offenders released from prison on drug offenses were most likely to recidivate, closely followed by property offenders (Iowa Department of Corrections 2016).

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

The LSI-R is an accurate and respected risk/need assessment tool, which identifies problem areas in an offender's life and predicts his/her risk of recidivism. It consists of 54 questions ranging across ten domains known to be related to an offender's likelihood of returning to prison. It assesses risk based on factors such as antisociality, drug history, employment, recreational and leisure activities, family, and antisocial peers. As shown in Table 1, LSI-R scores can range from 0-54. On average, males score 25 and females score 26 (Rhode Island Department of Corrections 2011).

Table 1: LSI-R Risk/Need Scoring

Risk/Need Level	LSI-R Score
High	40-54
Moderate High	33-39
Moderate	26-32
Low Moderate	19-25
Low	0-18

The LSI-R has been indicated as the most useful actuarial measure of adult offender recidivism (Gendreau, Goggin, and Smith 2002; Gendreau, Little, and Goggin 1996). Wooditch, Tang, and Taxman (2014) concluded those individuals who increased in total LSI-R score were more likely to be reconvicted of an offense than those who decreased in their total LSI-R scores. A study conducted on Iowa probation and parole data concurred that the LSI-R is significantly related to predicting future criminal activity (Prell 2006). Because a small number of offenders repeatedly commit crimes, it can be concluded that these offenders have high LSI-R scores. Therefore, emphasizing the importance of risk assessment and having an accurate tool (Einat 2008).

Socioeconomic status

Poverty is defined as, "the gap between one's needs and the resources available to fulfill them" (Mani, Mullainathan, Shafir, and Zhao 2013:976). The average family size in 2012 was 2.55 people (Statista 2016). The poverty level in January 2012 was $11,170 for a one-person household, $15,130 for a two-person household, and $19,090 for a three-person household (U.S. Department of Health & Human Services 2012). For each additional household member, the poverty level continues to increase by approximately $4,000.

Criminal defendants are overwhelmingly poor. In 2014, prior to incarceration, incarcerated people had a median annual income of $19,185, which was 41 percent lower than non-incarcerated people of similar ages (Rabuy and Kopf 2015). The stigma regarding poverty seems to revolve around minority races, but this fact can be said for all offenders regardless of gender, race, and ethnicity group. Research conducted by Western (2006) indicates that formerly incarcerated individuals earn even lower incomes after release. For example, white men, on average, earned $11,140 annually, Hispanic men, on average, earned $10,432 annually, and black men, on average, earned $8,012 annually (Wester 2006; Beckett and Harris 2011).

To further drive home this point, eighty to ninety percent of defendants in the criminal justice system qualify for court-appointed legal counsel (Beckett and Harris 2011; Zimmer 2013). Being approved for court-appointed legal counsel is based on an individual having an economic status as indigent. Iowa Code, Chapter 815, Section 9 states:

> A person is entitled to an attorney appointed by the court to represent the person if the person has an income level at or below one hundred twenty-five percent of the United States poverty level… In making the determination of a person's ability to pay for the cost of an attorney, the court shall consider not only the person's income, but also the availability of any assets subject to execution.

The problem gets worse. Gottschalk (2011) observed that some indigent defendants waive their right to counsel to avoid going further into debt by repaying the cost of court-appointed legal counsel.

Socioeconomic status certainly plays a role in an offender's day-to-day life, as well as what legal representation can be afforded, but what impact does socioeconomic status have on recidivism? The verdict is still out. According to Andrews and Bonta (1994:184), "no single variable has been more important in criminological theorizing than social class." Research prior to 1950 found large relationships between class and criminality. Today, a relationship still exists between class and criminality, but the relationships is slowly diminishing. Tittle and Meier (1990; 1991) showed socioeconomic status to be a very weak predictor of juvenile delinquency. Gendreau et al. (1996) also studied socioeconomic status and found that compared to other predictors used in their study, SES was found to be less robust, but still a predictor of recidivism.

Court-Ordered Monetary Sanctions

Recidivism is not a new concept in research, however little scholarly attention and menial amounts of empirical research have been devoted to the impact of increasing amounts of monetary sanctions on recidivism. What little has been done documents that burdensome criminal justice monetary sanctions, at times excluding restitution, tend to spawn recidivism (Zimmer 2013).

In the literature, court-ordered monetary sanctions are called several different names including economic sanctions, financial obligations, and legal financial obligations (Ruback 2011). Fines, along with death, are plausibly the oldest forms of criminal punishment. Historically, the institution of monetary sanctions as criminal punishment dates back to ancient civilizations namely the Greeks, Romans, ancient Near Easterners, and Germanic tribes (DeLisi and Conis 2013; Atkinson 2015). Fines as criminal

punishment served two expressed purposes during ancient times: restitution to the victim

and a tax for the public good (DeLisi and Conis 2013). These antique purposes still ring

true today. Presently, criminal punishment utilizing monetary payment can be found in

many countries around the world including the United States, Australia, the United

Kingdom, Sweden, and Germany.

Court-ordered monetary sanctions have been a component of criminal sentencing

in the United States since the arrival of the European settlers. In colonial America,

settlers detested the debtor's prisons in England and abandoned monetary sanctions for

most serious crimes (Atkinson 2015). Throughout the northern states, monetary sanctions

were implemented as punishment for minor criminal cases (Miethe and Lu 2005; Beckett

and Harris 2011; Harris, Evans, and Beckett 2011). If a person was not able to pay fines,

they could be subjected to physical penalties and penal servitude (Miethe and Lu 2005;

Beckett and Harris 2011). Financial penalties were also found in the southern states. The

implementation of punishment by monetary sanction set the groundwork for the convict

lease system, which existed from emancipation until the 1940s (Beckett and Harris 2011).

While monetary sanctions have been commonplace since the establishment of the

United States, they have been in and out of favor throughout American history (Atkinson

2015). In the 1970s came a change in the perceived effectiveness of fines. During this

decade, judges did not believe fines could change the behavior of individuals because

fine amounts were too low to have a deterrent value on the rich, but too high and

therefore unenforceable on the poor (Atkinson 2015). An investigation by the NPR found

that the practice of sentencing defendants and offenders with increasing amounts of

monetary sanctions is "a practice that causes the poor to face harsher treatment than

others who commit identical crimes and can afford to pay" (Shapiro 2014). By the late 1980s, fines were the preferred punishment against criminal offenders.

An inmate survey conducted by Harris et al. (2010), found that the use of monetary sanctions is now common in most US states and in the federal system. Fines are often accompanied by one or more other sanctions (DeLisi and Conis 2013). Financial sanctions are highly regarded because they are easy and cost efficient to administer and do not require additional criminal agencies to enforce (Klein 1997; Goldblatt and Lewis 1998; Einat 2008), they generate revenue for the state and local government (Butterfield 2004; Einat 2008), and the emergence of broken windows policing has law enforcement focusing on low level violations that without fines, would go unenforced (Atkinson 2015). Further, fines are compatible with dessert-based sentencing and are considered to be a humane punishment. They can be scaled to the severity of the specific offense, as well as the criminal history and income of the specific offender (Uglow 1995; Einat 2008). As Rusche and Kirschheimer (1939:169) stated, "the fine costs the state nothing while procuring the maximum penal effect."

While monetary sanctions have been around for decades, offenders must now pay for many services that were once free and the dollar amounts charged have grown substantially due to the increasing cost of running the nation's criminal justice system (Shapiro 2014). For example, in the late 1970s the court upheld an Oregon statute allowing the courts to charge offenders for the legal representation that is provided to them by the state because of their indigent socioeconomic status (*Fuller v. Oregon* 1974). Other services paid for by offenders include room and board for jail stays, probation and parole supervision, sex offender registry and annual fee, and the electronic monitoring

devices they are ordered to wear and use (Iowa Code, Chapter 356, Section 7; Iowa Code, Chapter 692A, Section 110; Iowa Code, Chapter 905, Section 14; Shapiro 2014).

Monetary sanctions are proposed to act as a specific and general deterrent, retribution, and rehabilitation to prevent recidivism (Hillsman and Green 1992; Ashworth 2000; Einat 2008; Atkinson 2015). The restitution component of monetary sanctions is proposed to work as a function of restoration (Ervin and Schneider 1990; Ruback 2002). Per Ruback (2011), many scholars believe monetary sanctions have some penological value. However, many other researchers are concluding monetary sanctions solely provide the retributive goal of the criminal justice systems and are not corrective in any fashion (O'Malley 2011). A study by Bouffard and Muftić (2007) found offenders who received fines were more likely to recidivate than persons sentenced to community service. A complete analysis of court-ordered monetary sanctions includes the four types of sanctions imposed in Iowa, ability to pay, and collection methods.

Costs, fines, and surcharges

The monetary sanction variable in Iowa includes four types of sanctions: costs, fines, restitution, and surcharges. These sanctions are imposed by the courts and other criminal justice agencies on persons accused or convicted of crimes. Research has typically focused on only one element of the monetary sanction variable (Ruback 2004). The following study examines all elements of the monetary sanction variable because during sentencing, they are generally not applied in isolation.

Costs are payments to reimburse the state and local jurisdictions for the costs of the criminal justice procedure. They cover the expenses of prosecution, confinement, and

community supervision. Typically, costs have a standard dollar rate for each criminal charge (Ruback 2004). Fines are monetary penalties, imposed to act as punishment for committing a specific crime. They can be either mandatory or by the discretion of the judge. While there is flexibility on fine imposition, jurisdictions normally have a "going rate" for each offense and therefore violators pay similar amounts (Hillsman and Greene 1992; Ruback 2004). Surcharges are add-on amounts for generating revenue for goals not necessarily related to the criminal justice procedure. In Iowa, surcharges are typically either criminal penalty surcharges or law enforcement initiative surcharges (Legislative Services Agency 2009). Both costs and fines are typically sentenced without consideration of the offender's ability to pay (Beckett and Harris 2011; Council of Economic Advisers 2015) and can be raised at the discretion of the city (Atkinson 2015).

Monetary sanctions can be thought of in two ways: an alternative to incarceration to reduce the rate of imprisonment or a supplemental punishment to incarceration. In the United States, "… no sentencing guidelines scheme contains a provision for the use of fines in place of incarceration, while several jurisdictions… limit the fine to a supplemental role, something to be imposed in addition to the real sentence" (Morris and Tonry 1990:116-17). According to Iowa Code, Chapter 909, Section 2, "the court may impose a fine in addition to confinement, where such is authorized." If monetary sanctions are an additional sentence to imprisonment, then the motive to reduce the rate of imprisonment disappears (O'Malley 2011).

Court-ordered monetary sanctions are not only imposed on felonies or serious crimes. Harris et al. (2010) found that "across the United States, two-thirds of felons sentenced to prison, and more than 80% of other felons and misdemeanants, were

assessed fees and fines by the courts in 2004." They are the normative punishment in cases of misdemeanors, quasi-criminal ordinance violations, and civil infractions (Gupta and Foster 2016). Historically, very little attention has been given to monetary sanctions, but recently they have seen an increase in attention likely due to the 2014 riots in Ferguson, Missouri. Investigation revealed unconstitutional racially based monetary sanction punishment practices on small-time, poor offenders by the Ferguson police and city court system (Perez 2016).

Restitution

Restitution is a court-ordered payment an offender must pay to their victim(s) to compensate them for any out-of-pocket losses directly relating to the crime. More specifically, restitution includes, but is not limited to, medical expenses, therapy costs, prescription charges, counseling expenses, lost wages, lost or damaged property, expenses related to participating in the criminal justice process, and funeral expenses (U.S. Department of Justice 2002; DeLisi and Conis 2013). Restitution is only imposed when specific and direct victims are suffered financial losses (Beckett and Harris 2011). Because of society's concern for victims, it would be politically correct to exclude restitution from analysis of monetary sanctions influence on recidivism. An alternative reason for exclusion of restitution is that it is driven by case-specific factors and is an uncontrollable variable (Harris et al. 2011). However, there are also good reasons to include it in analysis.

First, while restitution is now victim oriented, it was historically entrenched in rehabilitative purposes; it was an offender-focused remedy, in addition to providing

compensation to victims (Ruback 2011). Second, restitution has the same problems as court costs, fines, and surcharges. Payment rates are low. In two national studies, collection rates ranged from 45 percent (Smith, Davis, and Hillenbrand 1989) to 54 percent (Cohen 1995). Finally, all elements of monetary sanctions create problems of debt, unemployment, and increase revocation rates for offenders (Ruback 2011). In fact, mandatory restitution and victim compensation amounts have increased in the last twenty years causing substantially more debt for offenders (Katzenstein and Nagrecha 2011).

While restitution amounts are increasing, it is theorized that this variable of court-ordered monetary sanctions may not have the negative effects seen with costs, fines, and surcharges. Consistent with reintegrative shaming theory, restitution can be an effective rehabilitative device (Eglash 1958; Jacob 1970) by enabling offenders to take responsibility for their actions and make amends to their victims without stigmatization (Braithewaite 1989; Ruback 2002). While limited, research has indicated that successfully paying restitution is one of the strongest predictors of lowered recidivism (Ervin and Schneider 1990; Ruback 2002). One study compared male property offenders released to the Minnesota Restitution Center to a group of matched offenders released to conventional parole supervision. They found the restitution group had lower recidivism rates compared to those on conventional parole (Heinz, Galaway, and Hudson 1976). While informal restitution arrangements, like the Minnesota Restitution Center, have been found to be more effective than formal restitution (i.e., assigned through the court), formal restitution has still been found more effective in reducing recidivism than incarceration (Ruback 2002).

Ability to pay

The inception of the U.S. Constitution's Eighth Amendment in 1791 included the Excessive Fines Clause, which until recently, received minimal attention from courts or scholars. Following the 1998 court case *United States v. Bajakajian*, the Excessive Fines Clause has been read, "as long as a penalty is not grossly disproportionate to its accompanying offense, it is not barred by the Eighth Amendment" (McLean 2013:834).

After much debate and still much confusion, the Excessive Fines Clause can be read in two complementary, but distinct, parts. The first part is the proportionality principle, which links the penalty to the offense and the second part is an additional limiting principle, which links the penalty imposed to the offender's economic status and current life situation (McLean 2013).

Cooper Industries, Inc. v. Leatherman Tool Group, Inc. (2001) made the Eighth Amendment's prohibition against excessive fines and cruel and unusual punishment applicable to the states (McLean 2013). Many states, including Iowa, include an excessive fines clause in their constitution. Iowa Constitution Article 1, §17 states, "excessive bail shall not be required, excessive fines shall not be imposed, and cruel and unusual punishment shall not be inflicted." Even with these clarifications the Excessive Fines Clause continues to cause confusion and many states do not utilize an offender's ability to pay. After thorough examination of practices in the fifteen states with the highest prison populations, Diller, Bannon, and Nagrecha (2010:13) concluded:

> Despite the fact that most criminal defendants are indigent, none of the fifteen
> states examined pay adequate attention to whether individuals have the resources

to pay criminal justice debt, either when courts determine how much debt to
impose or during the debt collection process.

Courts should inquire into an offender's financial status when assessing monetary
sanctions, rather than waiting until a person fails to pay.

In nineteenth century England, the courts considered an offenders ability to pay,
but ran into difficulties during application. The fine could not exceed an offender's
capacity to pay and it must exceed the benefits derived from the illegal act, but no
solution was found that would not violate one or the other of these requirements (Rusche
and Kirchheimer 1939). "The system must assume that those who are fined are capable of
paying, and it thus justifies imprisonment for nonpayment" (Rusche and Kirchheimer
1939). As a result, prisons filled up due to nonpayment of fines either because offenders
were unable to pay or because they fraudulently refused to pay. Changes were deemed
necessary and maximum incarceration terms were set for convicts of proven insolvency
(Rusche and Kirchheimer 1939).

In the United States, imprisonment for nonpayment also occurred and court cases
developed out of feelings of injustice. *Tate v. Short* (1971) determined an indigent
offender may not be imprisoned for nonpayment of a fine for offenses which a fine is the
only punishment authorized. It was determined this decision was not sufficient and
Bearden v. Georgia (1983) determined local government can only imprison someone for
nonpayment if it can be proven that the offender could have paid the fine, but "willfully"
chose not to. The current Iowa Code, Chapter 909, Section 7 states:

A defendant is presumed to be able to pay a fine. However, if the defendant
proves to the satisfaction of the court that the defendant cannot pay the fine, the

defendant shall not be sentenced to confinement for the failure to pay the fine.

Many debtors enter the criminal justice system indigent and are made more so by the stigma of their new criminal record (Burch 2011). Therefore, for indigent individuals, monetary sanctions contribute to an ever-growing amount of legal debt and cycle of poverty that can be nearly impossible to escape. Attorney Vanessa Torres Hernandez stated, "If you have resources, a court fee isn't a big deal. You can pay that money. You can walk free. But for people who are already poor, the court fine and fee is in essence an additional sentence" (Shapiro 2014).

Collection

The collection process in Iowa is laxer than in other states, but it is undoubtedly difficult for those who classify as indigent. Unpaid legal obligations can be subject to interest, surcharges, and collection fees. Late fees are charged by nearly every jurisdiction and accrue quickly. Some states, like California and Florida, charge dollar amount late fees after a specific number of days or after each late payment; other states charge proportional fees and/or interest (Atkinson 2015). In Iowa, monetary sanctions not paid within thirty days are statutorily deemed delinquent and are assigned to the Centralized Collection Unit (CCU) who add a ten percent fee to cover collection costs (Legislative Services Agency 2014).

To avoid late fees, many jurisdictions allow payment plans. However, to take advantage of this payment plan service, some places charge a fee. This is a perplexing notion because those in requirement of payment plans typically are those least able to pay. Per Atkinson (2015:206), "some fees are modest – $10 in Virginia – but others are

much higher, such as $25 in Florida and $100 in New Orleans." I am aware of no county in Iowa that charges a payment plan fee. While no payment plan fee may be charged, most payment plans in Iowa begin at $50 a month through the courts (Iowa Judicial Branch 2016) or $100 a month through a county attorney's office.

In Iowa, sixty days after the debt is deemed delinquent court-ordered monetary sanction debt may be turned over to a county attorney or a debt collector that is under contract with the Judicial Branch (Iowa Judicial Branch 2016). After one year, if the debt is not in an established payment plan with the CCU and has not been assigned to a county attorney, the debt will be turned over to a private debt collector who adds a 25 percent collection fee (Legislative Services Agency 2014).

As mentioned previously, many offenders are indigent and therefore do not have money to pay their monetary sanctions. According to Judicial Branch (2013), the total outstanding court debt owed to the State of Iowa in 2013 was $633.5 million, 72 percent being criminal debt. Table 2 shows the collection rates in Iowa by case type. Typically, the more serious a case, the lower the collection rate.

Table 2: Iowa Collection Rates by Case Type

Case Type	Collection Rate
Felonies	11.7%
Aggravated Misdemeanor	17.2%
Serious Misdemeanor	26.5%
Simple Misdemeanor	37.7%
OWI	36.4%

Note: Collection rate information from Legislative Services Agency (2014)

If an individual does not pay their debt, attempts to collect may occur through issuance of wage garnishments, tax rebate interception, driver's license suspensions, denial of automotive registration renewals, use of warrants for seizure and sale of

personal property, and a contempt of court action for failure to pay court debt may be filed against the individual (DeLisi and Conis 2013; Iowa Judicial Branch 2016). Many in the scholarly community have concerns regarding these additional collection means (i.e. wage garnishments and driver's license suspensions). A driver's license can be crucial to maintaining a job, caring for families, and taking care of legal matters. Gupta and Foster (2016:7) stated, "suspending defendant's licenses decreases the likelihood that defendants will resolve pending cases and outstanding court debts. …states and local courts are encouraged to avoid suspending driver's licenses as a debt collection tool…" Issuance of a wage garnishment can take up to 25 percent of the disposable income, further depleting the wealth and resources of the already disadvantaged, and leave little left for other financial responsibilities.

Some researchers argue that the difficulties involved in collection will force some offenders to commit another offense to pay their monetary sanctions (Clark 1998; Einat 2004; Einat 2008). McLean and Thompson (2007:22) also discuss difficulties surrounding fine collection, "such a situation could inadvertently encourage a person to return to the behavior and illegal activities that resulted in the person's incarceration in the first place."

General Strain Theory as Theoretical Framework

General strain theory (GST), first postulated by Agnew (1992), has received much support since its introduction and is now one of the leading theories of crime. GST posits that stressful life events or personal strains create negative emotions which result in criminal behavior in the absence of strong conventional coping skills (Agnew 1992;

Broidy and Agnew 1997). GST expands on classic strain theory, suggesting a range of sources, not only financially induced negative experiences, can lead to stress.

According to classic strain theory, society puts pressure on individuals to achieve socially accepted goals in society, but they lack the means (e.g. middle-class status or monetary success) (Merton 1938). The inability to achieve the desired status or wealth through legal means creates a significant amount of strain on the individual. This strain may lead them to solve their yearning for status or wealth by engaging in criminal behavior.

Classic strain theory received much criticism and in response Agnew offered a more general explanation of crime encapsulating additional sources of strain that may drive an individual toward a criminal lifestyle. GST included three categories of strains: the inability to achieve positively valued goals, the removal of, or threat to remove, positively valued stimuli, and the presentation of a threat with harmful or negatively valued stimuli. The stress literature notes a sharp distinction between objective stressors and how an individual subjectively assesses those stressors (Agnew 2013). The four characteristics of strain, all of which are *subjective* strains, most likely to lead to crime are strains are seen as unjust, strains are seen as high in magnitude, strains are associated with low social control, and strains create pressure or incentive to engage in criminal coping (Agnew 2001; Agnew 2013).

These strain characteristics increase crime partly through affecting certain negative emotional states (Botchkovar, Tittle, and Antonaccio 2013), predominantly anger (Agnew 2013) and frustration (Agnew 2001). These negative emotions create pressure for corrective action. Corrective action has three broad and often overlapping

coping choices: emotional, cognitive, and behavioral coping (Botchkovar et al. 2013). Emotional coping, such as using drugs, helps individuals relax or manage stress. Cognitive coping helps positively reinterpret the strain. Lastly, behavioral coping, involves physical action to diminish the strain.

"Because coping techniques may vary in effectiveness, people often employ more than one method of dealing with strain" (Agnew 2006:91). The need for corrective action does not automatically lead to illegitimate coping behaviors, but it is more likely if conventional coping resources are scarce (i.e. conventional social support and self-control), which is the case among many low socioeconomic status individuals (Agnew 1992; Agnew 2006; Botchkovar et al. 2013).

Illegitimate coping behaviors primarily reside in the emotional and behavioral realms. Crime may be used as a method of coping to reduce strain, seek revenge, and/or alleviate negative emotions (Agnew 2001; Agnew 2013; Listwan, Sullivan, Agnew, Cullen, and Colvin 2013). Monetary strains are strongly associated with income-generating crimes (Felson, Osgood, Horney, and Wiernik 2012) because they provide a quick solution to money problems (Agnew 2013). During qualitative interviews conducted by Harris, Evans, and Beckett (2010:1785) they concluded, "it is conceivable that legal debt creates an incentive to seek illegal means to support themselves and, ironically, to make legal financial obligation payments, a pattern that would further increase the risk of criminal justice involvement." Monetary strains may also lead to the use of illegal drugs to cope with depression, anxiety, and hopelessness, as well as violent behavior to relieve anger and resentment (De Coster and Kort-Butler 2006; Agnew 2013). They may also affect feelings of self-worth, self-respect, and self-determination

(Atkinson 2015). Depression and anxiety, which are often comorbid, impact both internal and external focus and makes living a conventional life difficult.

No matter the coping method, it is apparent court-ordered monetary sanctions have the potential to strain already difficult lives and lead individuals to engage in criminal behavior. According to Alexes Harris, "the people most likely to face arrest and go through the courts are poor" (Shapiro 2014). Because most offenders are classified as indigent, court-ordered monetary sanctions are paid on a sliding scale. Therefore, these monetary sanctions do not drive offenders into poverty, but they serve as a strain, influencing decisions toward further pursuing a criminal lifestyle. Because poverty affects decision making by creating resource scarcity (Shah, Mullainathan, and Shafir 2012), crime is an easy way of responding to pressing demands.

Scarcity can create anger, which has a special place in the strain literature. Anger creates a circle of poor decision making because it disrupts cognitive processes in ways that impede noncriminal coping and it reduces the actual and perceived costs of crime (Agnew 2001). Scarcity further affects decision making by eliciting greater focus to pressing problems, while leading to the neglect of others, without sufficient attention to whether the benefits outweigh the costs (Shah et al. 2012). The financial scarcity offenders face due to their socioeconomic status as indigent and the pressing demands of criminal justice debt may affect their decision making by turning attention to monetary problems (i.e. paying off court-ordered monetary sanctions and having money to pay for life necessities) and neglecting the problematic possibility of being rearrested, sent back to prison, and charged with more monetary debt. "Similarly, many sociologists have noted that people with a criminal conviction are at a high risk of reoffending and that

rearrest and reincarceration reproduce poverty" (Harris et al. 2010). During an interview

by Maruna (2001:71), one offender stated:

> I was homeless, I couldn't get a YTS job (Youth Training Scheme, a government
>
> sponsored program), and like I couldn't get benefit, but I still had like over £1,000
>
> in fines that I had to pay at £8 a week. So I'm stuck in this rut. I've got to pay
>
> these fines or I've got to go to jail, and I've got to live as well. So, I was
>
> committing more crimes, going back to court and getting more fines, and it was
>
> just a vicious cycle. So the next thing I ended up back in prison again.

Poverty, increased by an overwhelming amount of court debt may drive offenders to acts

of desperation, including returning to a life of crime.

A study conducted by Harris et al. (2010) utilized large samples of national and

state-level court data and interviews (n=50) to assess the imposition and social and legal

consequences of court-ordered monetary sanctions. Examining prison inmate data, they

concluded that a large majority of the prison population received monetary sanctions

substantial to the individuals expected earnings (Harris et al. 2010). This 2004 study

included Iowa prisoners (n=51) and observed 67 percent were sentenced with monetary

sanctions (Harris et al. 2010).

During the interview process, a minority of individuals (20%) indicated that

making payments towards their legal debt was not unduly burdensome, the remaining

interviews indicated legal debt reduced family income and increased the likelihood of

ongoing criminal activity (Harris et al. 2010). One respondent was quoted by Harris et al.

(2010:1785) stating:

And my last PO, I asked her for a bus ticket to get to my appointments; she's like, oh, we don't do that anymore. I'm like, oh, OK, I'm not supposed to do any crime, I'm not supposed to… and frankly, I mean, I'm not trying or wanting to do any crime, and I still can't quite commit myself to do prostitution, but I think about it sometimes… at least that way I could pay some of these damn fines.

Several other respondents also indicated that monetary sanctions encouraged them to return to a life of crime.

Lastly, a study by Diller et al. (2010) examined monetary sanction practices in the fifteen states with the highest prison populations. The states examined were California, Texas, Florida, New York, Georgia, Ohio, Pennsylvania, Michigan, Illinois, Arizona, North Carolina, Louisiana, Virginia, Alabama, and Missouri, which account for over half of all state criminal filings. Thorough research and interviews with individuals involved in the criminal justice system led them to the following conclusions: monetary sanctions regularly total hundreds to thousands of dollars in debt, this punishment practice creates an endless cycle of debt, and financial sanctions create a barrier to those attempting to rebuild their lives after a criminal conviction and charts a path back to prison (Diller et al. 2010).

It can be concluded that court-ordered monetary sanctions can act as a strain, which in turn requires corrective action. This corrective action may result in criminal activity to reduce strain, seek revenge, and/or alleviate negative emotions (Agnew 2001; Agnew 2013; Listwan, Sullivan, Agnew, Cullen, and Colvin 2013).

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Chapter three details the research design and methodology utilized to conduct the current study. It presents the research hypotheses proposed for the analyses, participants and variables, steps done to prepare the data set for analysis, and the analytical plan. This study is a quantitative analysis of total monetary sanction amount and total restitution amount ordered by the court in relation to recidivism. Secondary data comes from the fiscal year 2015 dataset collected by the Iowa Department of Correction stored in the Iowa Correctional Offender Network (ICON) system, which contains information on a variety of topics related to the criminality and sociodemographic characteristics of each offender included in the study. Data also comes from Iowa Courts Online (https://www.iowacourts.state.ia.us), which contains information on the monetary sanction amounts of each offender included in the study.

Research Hypotheses

The research hypotheses in this study concern the effect large amounts of court-ordered monetary sanctions can have on recidivism. Specifically, they address the total amount of court-ordered monetary sanctions, including fines, costs, restitution, and surcharges, as well as exclusively the total amount of restitution offenders were charged with and how such large sanction amounts may affect criminal behavior. The research hypotheses are as follows:

1. As total court-ordered monetary sanction amount increases, the reported instances of return to prison will increase.

2. As total court-ordered restitution amount increases, the reported instances of return to prison will decrease.

3. The total court-ordered monetary sanction amounts predict above and beyond known predictors (i.e. age, sex, race, criminal history, SES) of recidivism with regard to reported instances of resentence to prison.

Quantitative Analysis

This study's main purpose is to determine if court-ordered monetary sanctions affect the recidivism of Iowa criminal offenders. Specifically, the quantitative analysis will help determine if larger amounts of court-ordered monetary sanctions have an increased effect on recidivism rate. Likewise, the quantitative analysis will also help determine if larger amounts of court-ordered restitution have a decreased effect on recidivism rate. The criminal justice system uses all aspects of monetary sanctions as deterrence, rehabilitation, and retribution (Hillsman and Green 1992; Atkinson 2015). Restitution is specifically used as restoration and is theorized to restore the victim and offender, lowering the recidivism rate (Ervin and Schneider 1990; Ruback 2002).

Deterrence relies on the threat of punishment to be effective, and while the most commonly associated type of punishment is incarceration, court-ordered monetary sanctions are closely behind. The criminal justice system has increased the severity of punishment through utilization of harsher, more expensive court-ordered monetary sanctions (Legislative Services Agency 2009). However, court-ordered monetary

sanctions may prove to be ineffective instruments of deterrence, rehabilitation, and retribution if offenders are entering the criminal justice system indigent and under considerable monetary strain. Thus, indicating large amounts of court-ordered monetary sanctions increase the rate of recidivism for criminal offenders. However, restitution, as the literature suggests, may prove to be an effective instrument of restoration for offenders, thus affecting the rate of recidivism for criminal offenders in the opposite way.

Data for this study come from a sample of 729 first-time Iowa prisoners exiting prison or work release by way of parole, special sentence or discharge-end of sentence between July 1, 2011 and June 30, 2012. The individuals were then tracked for three years after their release for instances of recidivism. The measure of recidivism tracked involves a return to prison with or without a new sentence. Four thousand seven hundred and forty individuals exited prison or work release in Iowa between the study parameters. Of these individuals, 2,505 were first-time prisoners, and from there 752 offenders were randomly chosen. After preparing the data set, 23 offenders were excluded from the study.

Only first-time prisoners were included in this study to observe the effect court-ordered monetary sanctions have on offenders, without having to take into consideration those with an already extensive criminal career. Recidivism rates are usually reported by the DOC for all prisoners. Because "less than ten percent of criminals commit more than fifty percent of crimes and even higher percentages of violent crimes" (DeLisi and Conis 2013: 39), recidivism rates presented in this paper differ from Iowa's 31.9 percent recidivism rate (Iowa Department of Corrections 2016).

The main data set comes from data collected by the Iowa Department of Corrections. The Iowa DOC has been collecting and analyzing recidivism rates annually beginning with persons leaving prison in the 2004 fiscal year. They use this information to develop strategies to improve recidivism outcomes. The data set consists of mostly complete demographics, convicting offense descriptions, and recidivism information for each offender. The data set therefore facilitates a secondary analysis of recidivism statistics and was obtained, with IRB approval, from Jerry Bartruff, Director at the Iowa Department of Corrections (see Appendix A and B).

Along with the information provided from the main data set, court-ordered monetary sanction amounts were extracted from Iowa Courts Online. Specifically, the monetary sanction amounts for fines, costs, restitution, and surcharges were extracted for the complied amount of monetary sanctions for all court cases prior to and including the offense that convicted the offender to incarceration. The solitary restitution amount variable for all court cases prior to and including the offense that convicted the offender to incarceration was also recorded.

This study analyzes what effects, if any, the amount of court-ordered monetary sanction and the amount of court-ordered restitution have on the recidivism of criminal offenders in Iowa. It also analyzes whether or not the amount of court-ordered monetary sanction and the amount of court-ordered restitution predicts above and beyond known predictors of recidivism with regard to reported instances of resentence to prison.

Sample

The sample comprised 752 adult offenders who were released from the Iowa prison system over a twelve-month period in 2011-2012. Although all 752 individuals had complete recidivism data, 21 of the individuals had their initial prison conviction expunged therefore removing court-ordered monetary sanction data from the study and two of the individuals were deceased before the end of the three-year study period. Therefore, the final sample consisted of 729 adult offenders. Sociodemographic information in relation to the final sample and recidivist subsample is presented in Table 3. At the time of release from prison, the final sample's mean age was 33.59 years (SD=10.27) and the recidivist subsample's mean age was 33.13 years (SD=9.9). The final sample's mean LSI-R score was 30.18 (SD=7.53) and the recidivist subsample's mean LSI-R score was 29.78 (SD=7.39). These scores fall in the moderate risk category.

Table 3: Sociodemographic Information about Final Sample and Recidivist Subsample

Variables	Complete Sample (N = 729)		Recidivist Subsample (N = 138)	
	N	%	N	%
Sex				
Male	635	87.1%	120	86.96%
Female	94	12.9%	18	13.04%
Race				
White	532	72.98%	109	78.99%
Black	179	24.55%	26	18.84%
American Indian or Alaskan Native	14	1.92%	2	1.45%
Asian or Pacific Islander	4	.55%	1	.72%
Ethnic origin				
Non-Hispanic	668	91.63%	131	94.93%
Hispanic	61	8.37%	7	5.07%
State public defender (SES variable)				
Yes	693	95.06%	132	95.65%
No	36	4.94%	6	4.35%
Recidivate				
No	591	81.07%		
Yes	138	18.93%		

Measures

Indicators of monetary sanctions (i.e. total sanction amount and total restitution

amount) and socioeconomic status (i.e. attorney of record) were gathered through review

of public court records on Iowa Court Online. Official criminal data (i.e. prison

conviction and recidivism information) and sociodemographic data for study sample were

received in October 2016 from the Iowa Department of Corrections (DOC).

Table 4 shows descriptive information regarding the monetary sanction variables.

Total sanction amount was defined as the total amount of costs, fines, restitution, and

surcharges of all Iowa court charges up to and including the charges sentencing the

offender to their initial prison sentence (M=$18,936.54, SD=40,427.22, range=292.03-

655,505.30). Total restitution amount was defined as the total amount of restitution of all

Iowa court charges up to and including the charges sentencing the offender to their initial

prison sentence (M=$6,165.59, SD=36,939.59, range=0-653,791.80).

Table 4: Monetary Sanction Descriptive Statistics of Complete Sample

	Mean	SD	Min	Max
Total Sanction Amount	$18936.54	40427.22	$292.03	$655505.30
Total Restitution Amount	$6165.59	36939.59	$0.00	$653791.80

Controls for age at release (M=33.59, SD=10.27, range=18-71), sex (87.1% male

[coded as 0], 12.9% female [coded as 1]), White (72.98%, coded as 0), and

socioeconomic status represented by retainment of state-appointed attorney (95.06% yes

[coded as 0], 4.94% no [coded as 1]) were included.

Initial prison conviction charge information, specifically information on the most

serious offense for which the offender was sentenced to prison, in relation to the final

sample and the recidivist subsample is presented in Table 5. For purposes of using this

variable in analysis, 131 committed offenses were re-coded into five individual

categories: drug (67.49% no [coded as 0], 32.51% yes [coded as 1]), property (72.43% no

[coded as 0], 27.57% yes [coded as 1]), violent (76.13% no [coded as 0], 23.87% yes

[coded as 1]), public order [86.29% no [coded as 0], 13.71% yes [coded as 1]), and other

(97.67% no [coded as 0], 2.33% yes [coded as 1]) , and further broken down into

subtypes.

Table 5: Initial Prison Conviction for Final Sample and Recidivist Subsample

	Complete Sample (N=729)		Recidivist Subsample (N=138)	
Variables	N	%	N	%
Offense Type				
Drug	237	32.51%	59	42.75%
Property	201	27.57%	40	28.98%
Violent	174	23.87%	25	18.12%
Public order	100	13.71%	7	5.07%
Other	17	2.33%	7	5.07%
Drug Subtype				
Drug possession	16	2.19%	0	0
Trafficking	208	28.53%	58	42.03%
Other drug	13	1.78%	1	.72%
Property Subtype				
Arson	4	.55%	1	.72%
Burglary	95	13.03%	18	13.04%
Forgery/Fraud	26	3.57%	4	2.9%
Theft	65	8.92%	16	11.6%
Vandalism	11	1.51%	1	.72%
Violent Subtype				
Assault	87	11.93%	4	2.9%
Murder/Manslaughter	20	2.74%	3	2.17%
Robbery	10	1.37%	1	.72%
Sex	44	6.04%	14	10.14%
Other violent	13	1.78%	3	2.17%

Note: Offense listed was the offender's most serious offense

Table 5: Continued

	Complete Sample (N=729)		Recidivist Subsample (N=138)	
	N	%	N	%
Public Order Subtype				
Alcohol	6	.82%	0	0
OWI	54	7.41%	4	2.9%
Sex offender registry/residency	14	1.92%	1	.72%
Weapons	18	2.47%	2	1.45%
Traffic	6	.82%	0	0
Other public order	2	.27%	0	0
Other Subtype				
Animals	2	.27%	0	0
Special sentence revocation	12	1.65%	6	4.35%
Other criminal	3	.41%	1	.72%

Note: Offense listed was the offender's most serious offense

Recidivism (81.07% no [coded as 0], 18.93% yes [coded as 1]), was the variable of interest. Recidivism was defined as the first return to prison following discharge from prison or work release during the 2012 fiscal year. Recidivism to prison can be the result of either a technical violation or a new charge that occurred during the three-year follow-up period. As shown in Table 6, the recidivism dependent variable was further broken down. Days to recidivism was also analyzed (M=403.33 days, SD=270.04, range=29-1,079). This study and the Iowa DOC use recidivism definitions and terms developed by the Association of State Correctional Administrators (ASCA) and used extensively in research documents to establish standard performance measures of importance to corrections (Durose et al. 2014; King and Elderbroom 2014; National Institute of Justice 2014; Association of State Correctional Administrators 2015; Iowa Department of Corrections 2016).

Table 6: Information about Recidivism Offense Types and Subtypes

Variables	Recidivists Subsample (N=138)	
	N	%
Recidivism Offense Type		
Drug	24	17.39%
Property	7	5.07%
Violent	6	4.35%
Public order	18	13.04%
Other	1	0.72%
Technical	82	59.42%
Drug Subtype		
Drug possession	9	6.52%
Trafficking	14	10.14%
Other drug	1	0.72%
Property Subtype		
Burglary	1	0.72%
Theft	6	4.35%
Violent Subtype		
Assault	5	3.62%
Kidnap	1	0.72%
Public Order Subtype		
OWI	1	0.72%
Weapons	2	1.45%
Traffic	2	1.45%
Flight/Escape	11	7.97%
Other public order	2	1.45%
Other Subtype		
Other criminal	1	1.45%

Preparing the data set

With a data set of this size, several offenders are likely to have missing or incomplete information in some variables that are important to this research. Many variables, if there is not a known entry, have the option to leave a value blank, indicating the information is 'unknown'. For each step of the analyses (logistic regression, ROC

curve analysis, negative binomial regression, and two-sample t-test), cases are selected to be included if, and only if, they do not have any value necessary for the analyses marked as 'unknown'.

Some offenders had their initial prison conviction expunged therefore removing court-ordered monetary sanction data from the study (Iowa Code, Chapter 901C, Section 2) and two of the individuals were deceased before the end of the three-year study period. These offenders were removed from analysis.

Analytical plan

In this study, four analytical techniques were used to analyze the effect of monetary sanctions on recidivism rates of Iowa offenders. First, logistic regression was conducted for general drug recidivism, general property recidivism, and general violent recidivism. Logistic regression is the appropriate regression analysis to conduct because the dependent variable, recidivism, is binary (no=0, yes=1) (Hosmer, Lemeshow, and Sturdivant 2013). Each general type of recidivism was further broken down by male and female analysis. Further, each general type of recidivism was broken down into subtypes: drug possession recidivism, trafficking recidivism, burglary recidivism, theft recidivism, kidnap recidivism, and assault recidivism.

Second, receiver operating characteristic (ROC) curve analysis was conducted for drug recidivism, property recidivism, and violent recidivism. ROC curve analysis provides a measure of area under the curve (AUC). AUC provides the probability that the offender's total sanction amount or total restitution amount can predict who does recidivate and who does not. The AUC statistic ranges from a value of 0.5 (indicating

chance predictive power for recidivism) to a value of 1.0 (indicating perfect predictive power for recidivism). The greater the AUC statistic, the better is the predictive power of the monetary sanction amount.

Third, a negative binomial regression model was used to estimate whether total sanction amount and total restitution amount were associated with days until recidivism. This is the appropriate statistical technique since the dependent variable, days until recidivism, is a count variable and the variance is greater than the mean (Hoffmann 2004). The model included monetary sanction variables, total sanction amount and total restitution amount, as well as sociodemographics and prior conviction types.

Fourth, two-sample t-tests were estimated to determine if statistically significant differences existed between public-attorney and private attorney groups for the covariates and LSI-R scores. T-tests highlight any significant between group differences within the respective samples (DeLisi, Barnes, Beaver, and Gibson 2009).

CHAPTER IV

RESULTS

Logistic Regression Analysis for Drug Recidivism

As shown in Table 7, neither total sanction amount nor total restitution amount were significantly associated with general drug recidivism. While the variables of interest were not significantly associated, having a drug offense from initial prison conviction was strongly associated with general drug recidivism (OR=8.002, SE=4.168, z=3.99, p<.001). This association means that having a drug offense from initial prison conviction lends an offender to be significantly more likely to have their recidivism conviction be a drug offense. In fact, a drug offense from initial prison conviction indicates that a recidivist is 700.2% more likely to commit another drug offense. This finding shows that convicted drug offenders tend to be specialized in their offending patterns. This model took into consideration sociodemographics including age at release, sex, white status, and LSI-R score, but did not find any to be significantly associated with general drug recidivism.

Table 7: Logistic Regression Model for General Drug Recidivism

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00001	0.99
Total Restitution Amount	.9999	.00001	-0.79
Initial Conviction			
Prior Drug	8.002	4.168	3.99***
Sociodemographics			
Age at Release	1.008	.0221	0.38
Sex (females as reference group)	1.825	1.009	1.09
White (non-whites as reference group)	.8578	.4175	-0.32
LSI-R Score	.9728	.029	-0.93

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

As shown in Table 8 and Table 9 neither total sanction amount nor total restitution amount were significantly associated with general drug recidivism when the analysis was run individually for males and females. While the variables of interest were not significantly associated, having a drug offense from initial prison conviction was strongly associated with general drug recidivism for males (OR=12.198, SE=8.089, z=3.77, p<.001), but it was not significant for females. This association means that males are the main cause for the strong association in Table 5. In other words, having a drug offense from initial prison conviction lends a male offender to be significantly more likely to have their recidivism conviction be a drug offense, but not a female offender. In fact, a drug offense from initial prison conviction indicates that a male recidivist is 1,119.8% more likely to commit another drug offense. This finding shows that male convicted drug offenders tend to be specialized in their offending patterns. This model took into consideration sociodemographics, but did not find any to be significantly associated with general drug recidivism when the analysis was ran individually for males

and females. However, white status was perfectly associated with general drug recidivism

for females and was therefore dropped from the female model.

Table 8: Logistic Regression Model for General Drug Recidivism for Males

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00001	.82
Total Restitution Amount	.9999	.00002	-0.38
Initial Conviction			
Prior Drug	12.198	8.089	3.77***
Sociodemographics			
Age at Release	.9959	.0266	-0.15
White (non-whites as reference group)	.7987	.406	-0.44
LSI-R Score	.9794	.0325	-0.63

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Table 9: Logistic Regression Model for General Drug Recidivism for Females

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00008	.5
Total Restitution Amount	.9999	.0002	-0.33
Initial Conviction			
Prior Drug	1.974	2.092	.64
Sociodemographics			
Age at Release	1.049	.0458	1.09
LSI-R Score	.9363	.07	-0.88

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

As shown in Table 10 and Table 11 neither total sanction amount nor total

restitution amount were significantly associated with drug possession recidivism or drug

trafficking recidivism. While the variables of interest were not significantly associated,

having a drug offense from initial prison conviction was significantly associated with

drug possession recidivism (OR=6.538, SE=5.418 z=2.27, p<.05) and significantly

associated with trafficking recidivism (OR=13.08, SE=10.32, z=3.26, p<.001). In other

words, having a drug offense from initial prison conviction lends an offender to be

significantly more likely to have their recidivism conviction be a drug possession or

trafficking offense. In fact, a drug offense from initial prison conviction indicates that a

recidivist is 553.8% more likely to commit a drug possession offense or 1,208% more

likely to commit a trafficking offense. This finding shows that convicted drug offenders

tend to be specialized in their offending patterns. Both models took sociodemographics

into consideration. In the drug possession recidivism model, LSI-R score became

significant (OR=.9063, SE=.0438, z=-2.04, p<.05). Indicating that as LSI-R score

increases by one point, offenders are 9.37% less likely to have their recidivism conviction

be a drug possession conviction. In the trafficking model, no sociodemographic factors

were significantly associated with trafficking recidivism.

Table 10: Logistic Regression Model for Drug Possession Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00002	0.90
Total Restitution Amount	.9999	.00003	-0.65
Initial Conviction			
Prior Drug	6.538	5.418	2.27*
Sociodemographics			
Age at Release	.9991	.0358	-0.03
Sex (females as reference group)	.7924	.8739	-0.21
White (non-whites as reference group)	1.256	1.055	0.27
LSI-R Score	.9063	.0438	-2.04*

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Table 11: Logistic Regression Model for Trafficking Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00001	.57
Total Restitution Amount	.9999	.00002	-0.34
Initial Conviction			
Prior Drug	13.08	10.32	3.26***
Sociodemographics			
Age at Release	1.014	.0291	.47
Sex (females as reference group)	1.939	1.381	.93
White (non-whites as reference group)	.6576	.3982	-0.69
LSI-R Score	1.006	.0396	.15

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Logistic Regression Analysis for Property Recidivism

As shown in Table 12, neither total sanction amount or total restitution amount were significantly associated with property recidivism. This model took sociodemographics into consideration including, age at release from prison or work release, sex, white status, and LSI-R score. None of the sociodemographic factors were found to be significant.

Table 12: Logistic Regression Model for General Property Recidivism

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00002	1.15
Total Restitution Amount	.9999	.00005	-0.82
Initial Conviction			
Prior Property	1.246	1.118	.25
Sociodemographics			
Age at Release	1.002	.0381	.04
Sex (females as reference group)	1.119	1.238	.1
White (non-whites as reference group)	2.138	2.34	.69
LSI-R Score	.9654	.0499	-0.68

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Individual logistic regression models for general property recidivism were

computed for males and females. As shown in Table 13, neither total sanction amount nor

total restitution amount were significantly associated with male general property

recidivism. The model considered sociodemographic variables. For females, all

socioeconomic variables were perfectly associated with general property recidivism and

were therefore dropped from the models. Because of this, no model is shown.

Table 13: Logistic Regression Model for General Property Recidivism for Males

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.0000	1.3
Total Restitution Amount	.9999	.0001	-.6
Initial Conviction			
Prior Property	1.879	1.768	.67
Sociodemographics			
Age at Release	1.021	.0397	.55
White (non-whites as reference group)	1.902	2.107	.58
LSI-R Score	.9878	.0569	-.21

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Burglary recidivism and theft recidivism were both similar to general property recidivism. As shown in Table 14 and Table 15, neither total sanction amount nor total restitution amount were significantly associated with burglary recidivism or theft recidivism. Both models considered sociodemographic variables. Having a property offense from initial prison conviction, sex, and white status were dropped from the burglary recidivism model because they were perfectly associated with burglary recidivism.

Table 14: Logistic Regression Model for Burglary Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00009	.89
Total Restitution Amount	.9998	.0003	-0.44
Sociodemographics			
Age at Release	1.163	.1318	1.33
LSI-R Score	1.423	.5233	.96

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Table 15: Logistic Regression Model for Theft Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00002	1.09
Total Restitution Amount	.9999	.00004	-0.76
Initial Conviction			
Prior Property	.5714	.6533	-0.49
Sociodemographics			
Age at Release	.9789	.0429	-0.49
Sex (females as reference group)	1.578	1.782	.4
White (non-whites as reference group)	1.821	2.034	.54
LSI-R Score	.9416	.052	-1.09

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Logistic Regression Analysis for Violent Recidivism

As shown in Table 16, neither total sanction amount or total restitution amount were significantly associated with general violent recidivism. The model considered sociodemographic variables. Sex was dropped from the model because it was perfectly associated with general violent recidivism.

Table 16: Logistic Regression Model for General Violent Recidivism

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.0000	.00002	.55
Total Restitution Amount	.9999	.00003	-0.07
Initial Conviction			
Prior Violent	.2721	.4204	-0.84
Sociodemographics			
Age at Release	.856	.0795	-1.68
White (non-whites as reference group)	1.942	2.162	.6
LSI-R Score	1.05	.0648	.79

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

Individual logistic regression models for general violent recidivism were computed for males and females. As shown in Table 17, neither total sanction amount nor total restitution amount were significantly associated with male general violent recidivism. The model considered sociodemographic variables. For females, all variables were dropped from the model as there were not enough observations to accurately compute. Because of this, no model is shown.

Table 17: Logistic Regression Model for General Violent Recidivism for Males

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.000	.00002	.55
Total Restitution Amount	.9999	.00003	-0.07
Initial Conviction			
Prior Violent	.2721	.4204	-0.84
Sociodemographics			
Age at Release	.856	.0795	-1.68
White (non-whites as reference group)	1.942	2.162	.6
LSI-R Score	1.05	.0648	.79

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

As shown in Table 18, neither total sanction amount nor total restitution amount were significantly associated with kidnap recidivism. The model took sociodemographic variables into consideration. Having a violent conviction from initial prison, sex, and white status were perfectly associated with kidnap recidivism and were therefore dropped from the model.

Table 18: Logistic Regression Model for Kidnap Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	1.0000	.00005	.79
Total Restitution Amount	.9975	.0037	-0.69
Sociodemographics			
Age at Release	1.052	.162	.33
LSI-R Score	3.241	4.915	.78

***p<.001, **p<.01, *p<.05
Note: OR=Odds ratio; SE=Standard error; Z=z-score

As shown in Table 19, neither total sanction amount nor total restitution amount were significantly associated with assault recidivism. The model took sociodemographic variables into consideration. Age at release from prison or work release (OR=.7786, SE=.1114, z=-1.75, p<.08) was significantly associated with assault recidivism. This indicates that as an offender ages, they are 22.14% less likely to have their recidivism conviction be an assault conviction. The sex variable was dropped from the model because it was perfectly associated with assault recidivism.

Table 19: Logistic Regression Model for Assault Recidivism Subtype

Variable	OR	SE	Z
Monetary Sanctions			
Total Sanction Amount	.9999	.00004	-0.18
Total Restitution Amount	1.0000	.00005	.42
Initial Conviction			
Prior Violent	.3087	.4856	-0.75
Sociodemographics			
Age at Release	.7786	.1114	-1.75^
White (non-whites as reference group)	1.545	1.767	.38
LSI-R Score	1.006	.0637	.09

***p<.001, **p<.01, *p<.05, ^p<.08
Note: OR=Odds ratio; SE=Standard error; Z=z-score

ROC Curve Analysis for Drug Recidivism

As shown in Table 20 and Figure 1, ROC curve analysis was computed on drug

recidivism. In this analysis, total sanction amount (AUC=.6253, SE=.0538) and total

restitution amount (AUC=.5436, SE=.0598) were found to be weakly, but better than

random chance, associated with drug recidivism.

Table 20: ROC Curve for Drug Recidivism

Variable	AUC[1]	SE
Total Sanction Amount	.6253	.0538
Total Restitution Amount	.5436	.0598

[1]AUC: 0.5 indicates random chance, therefore, anything between 0.5 and 0.7 is weak;
0.71-0.8 is moderate; 0.8 to 0.9 is strong; and 0.91 and above is best
Note: AUC=Area under the curve; SE=Standard error

Figure 1: ROC Curve for Drug Recidivism

ROC Curve Analysis for Property Recidivism

As shown in Table 21 and Figure 2, ROC curve analysis was computed on property recidivism. In this analysis, total sanction amount (AUC=.6929, SE=.078) was found to be weakly, but better than random chance, associated with drug recidivism and total restitution amount (AUC=.7219, SE=.0863) was found to be moderately associated with drug recidivism.

Table 21: ROC Curve for Property Recidivism

Variable	AUC[1]	SE
Total Sanction Amount	.6929	.078
Total Restitution Amount	.7219	.0863

[1]AUC: 0.5 indicates random chance, therefore, anything between 0.5 and 0.7 is weak; 0.71-0.8 is moderate; 0.8 to 0.9 is strong; and 0.91 and above is best
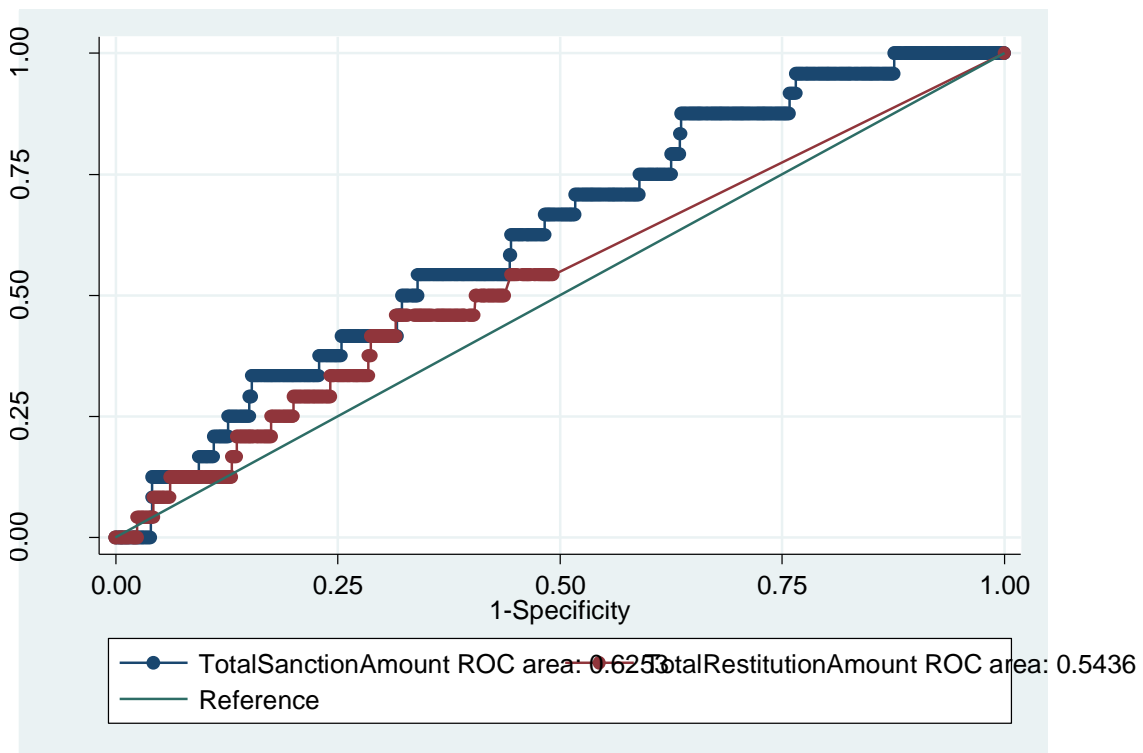Note: AUC: Area under the curve; SE=Standard error
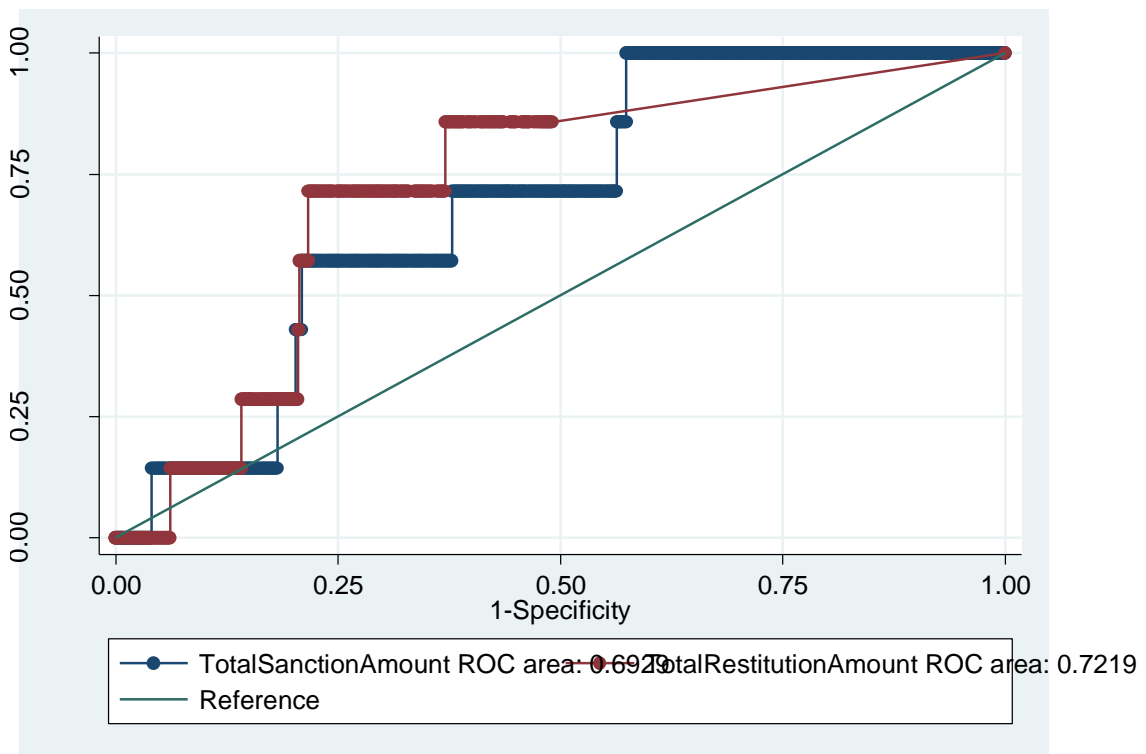
Figure 2: ROC Curve for Property Recidivism

ROC Curve Analysis for Violent Recidivism

As shown in Table 22 and Figure 3, ROC curve analysis was computed on violent recidivism. In this analysis, total sanction amount (AUC=.7149, SE=.1155) was found to be moderately associated with drug recidivism and total restitution amount (AUC=.5735, SE=.1175) was found to be weakly, but better than random chance, associated with drug recidivism.

Table 22: ROC Curve for Violent Recidivism

Variable	AUC[1]	SE
Total Sanction Amount	.7149	.1155
Total Restitution Amount	.5735	.1175

[1]AUC: 0.5 indicates random chance, therefore, anything between 0.5 and 0.7 is weak; 0.71-0.8 is moderate; 0.8 to 0.9 is strong; and 0.91 and above is best
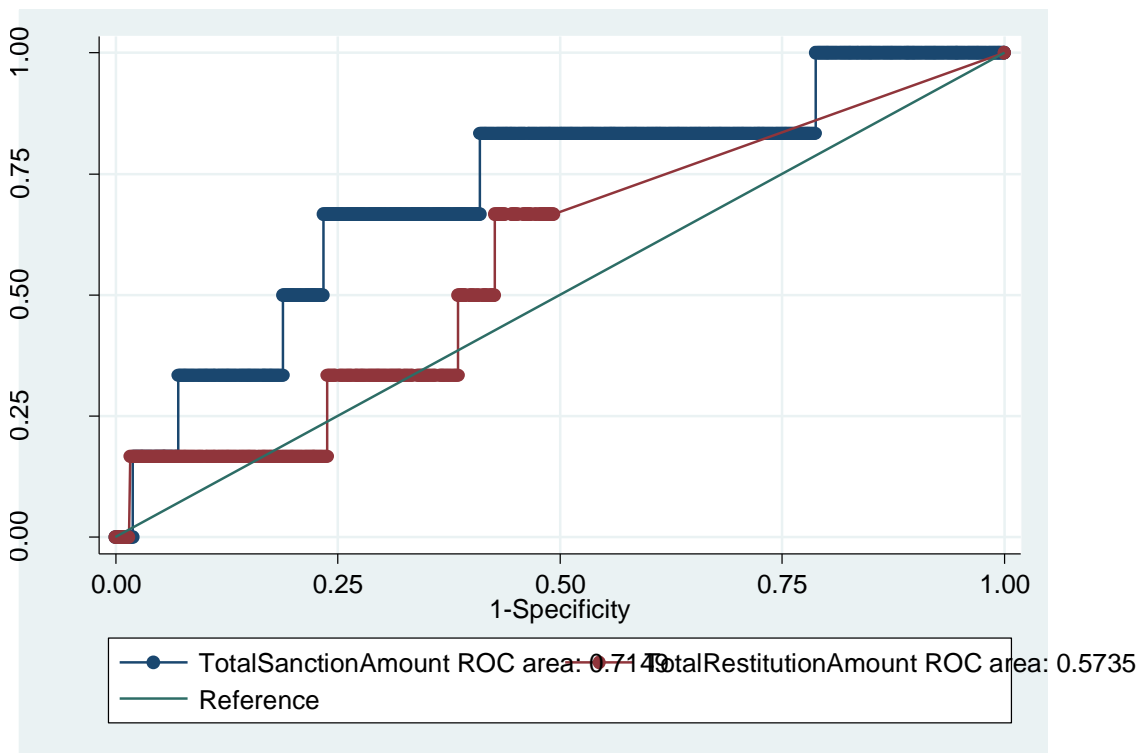Note: AUC=Area under the curve; SE=Standard error

Figure 3: ROC Curve for Violent Recidivism

Negative Binomial Regression Analysis for Days to Recidivism

As shown in Table 23, both total sanction amount (b=-.00001, z=-1.85, p<.065) and total restitution amount (b=.00001, z=2.32, p<.05) were significantly associated with days to recidivism. From these results, it can be determined that as total sanction amount increases, days to recidivism decreases. Furthermore, as total restitution amount increases, days to recidivism increases. According to this information, restitution may act as a protective factor, helping offenders stay out of prison longer. This model included sociodemographics and prior conviction types. Neither sex nor white status were significantly associated with days to recidivism, but having a violent offense from initial prison conviction was significantly associated with days to recidivism (b=-0.4539, z=-2.00, p<.05). This indicates that having a violent offense from initial prison conviction makes an offender quicker to recidivate.

Table 23: Negative Binomial Regression Model for Days to Recidivism

Variable	b	SE	Z
Monetary Sanctions			
Total Sanction Amount	-0.00001	5.91e-06	-1.85^
Total Restitution Amount	.00001	6.41e-06	2.32*
Sociodemographics			
Sex (females as reference group)	.0441	.1732	.25
White (non-whites as reference group)	-0.0213	.1476	-0.14
Prior Conviction			
Prior Drug	.1659	.1984	.84
Prior Property	-0.2439	.2062	-1.18
Prior Violent	-0.4539	.2264	-2.00*
n	138		

***p<.001, **p<.01, *p<.05, ^p<.065
Note: b= negative binomial regression coefficient; SE=Standard error; Z=z-score

Two-Sample T-Test Analyses for Monetary Sanctions

Tables 24 and 25 display two-sample t-tests for both types of monetary sanction amounts and the two legal representation options. In the total sanction amount model, there are group differences at the 0.05 significance level (t=-2.39; p=0.0169). In the total restitution amount model, there are group differences at the 0.05 significance level (t=-2.46; p=0.0143). The results reveal that those individuals who qualified as indigent and retained a state appointed public defender, on average, had significantly less total sanction charge amount and less total restitution charge amount than those individuals who did not.

Table 24: Two-Sample T-Test Model for Total Sanction Amount

Variable	N	Mean	SE	SD
Public Defender	693	$18122.34	1457.24	38361.69
Private Attorney	36	$34609.89	11344.19	68065.17

Table 25: Two-Sample T-Test Model for Total Restitution Amount

Variable	N	Mean	SE	SD
Public Defender	692	$5401.24	1308.75	34427.71
Private Attorney	36	$20858.01	11437.21	68623.27

Two-Sample T-Test Analyses for LSI-R Score

Table 26 displays a two-sample t-test for LSI-R score and the two legal representation options. There are group differences at the 0.01 significance level (t=5.45; p=0.000). The results revealed that those individuals who qualified as indigent and retained a state appointed public defender, on average, had significantly higher LSI-R scores than those individuals who did not.

Table 26: Two-Sample T-Test Model for LSI-R Score

Variable	N	Mean	SE	SD
Public Defender	669	30.53	.286	7.398
Private Attorney	36	23.639	1.191	7.144

CHAPTER V

DISCUSSION

Format of Discussion

The discussion chapter is divided into the following format. The results of the drug recidivism models are discussed followed by a discussion of the property recidivism and violent recidivism models. Each hypothesis is discussed in relation to the outcomes derived for the respective models. Similar to the results section formatting, each batch of models is prefaced using a heading indicating which type of recidivism is being discussed. Finally, the additional data analysis models are discussed in relation to the outcomes derived for the respective models.

Variable Significance and Hypothesis - Drug Recidivism Models

Examination of the logistic models according to the first hypothesis which states, as total court-ordered monetary sanction amount increases, the reported instances of return to prison will increase, is not supported by the data in this analysis. Examination of the models according to the second hypothesis which states, as total court-ordered restitution amount increases, the reported instances of return to prison will decrease, is not supported by the data in this analysis. Examination of the models according to the third hypothesis which states, the total court-ordered monetary sanction amounts predict above and beyond known predictors (i.e. age, sex, race, criminal history, SES) of recidivism with regard to reported instances of return to prison, is not supported by the data in this analysis.

While prior research has shown that monetary sanctions act as a financial barrier, charting a path back to a criminal lifestyle and prison conviction (Maruna 2001; Diller et al. 2010; Harris et al. 2010; Zimmer 2013), the covariate total sanction amount did not produce any significant recidivism outcomes among offenders in this analysis. According to theory, restitution can be an effective rehabilitative device (Eglash 1958; Jacob 1970). However, the covariate total restitution amount did not produce any significant recidivism outcomes among offenders in this analysis.

The data show that offenders, whose most serious offense from their initial prison conviction was a drug offense, are likely to recidivate with another drug offense. This finding is consistent with the findings of the National Council on Alcoholism and Drug Dependence, Inc. (2015) who found "approximately 95% of inmates return to alcohol and drug use after release from prison, and 60-80% of drug abusers commit a new crime (typically a drug-drive crime) after release from prison." Additionally, Chandler, Fletcher, and Volkow (2009) suggest many drug-addicted individuals rapidly return to drug use following long periods of abstinence during incarceration. From a strain theory perspective, Botchkovar et al. (2013) suggest that prior coping history has some effect on subsequent coping choices. Furthermore, analysis showed that drug recidivism due to a drug offense from initial prison conviction is only significant for male offenders.

Additionally, analysis showed drug offenders are significantly likely to have their recidivism conviction be a drug possession offense; this likelihood doubles for a trafficking offense. This is consistent with research by Langan and Levin (2002), who found a higher percentage of drug offenders returned to prison on trafficking charges. As the literature notes, crime is frequently used to get money quickly (Agnew et al. 1996;

Cernkovich et al. 2000; Colvin 2000). Therefore, from a strain theory perspective, individuals are trafficking drugs to reduce the strain brought on by failure to achieve monetary goals (i.e. pay back monetary sanction and live a conventional lifestyle).

No sociodemographic variables were found to be significantly associated with general drug recidivism or trafficking recidivism. LSI-R score was the only sociodemographic variable found to be significantly associated with drug possession recidivism. Indicating offenders with lower LSI-R scores are significantly more likely to recidivate with a drug possession offense than offenders with higher LSI-R scores.

Examination of the ROC curve for drug recidivism shows that total court-ordered monetary sanction amount and total restitution amount are weakly, but better than random chance, associated with drug recidivism.

In summary, logistic regression analysis revealed monetary sanction amounts have null effects on drug recidivism. However, ROC curve analysis revealed total sanction amount and total restitution amount are weakly associated with drug recidivism. Logistic regression results showed offenders were more likely to recidivate with a drug offense if they were sentenced to prison on a drug conviction and if they were male. In addition, offenders were more likely to recidivate with a drug trafficking offense than a drug possession offense, although both were significantly linked to prior drug offending. Lastly, lower LSI-R scores were significantly associated with drug possession recidivism.

Variable Significance and Hypothesis - Property Recidivism Models

Examination of the logistic models according to the first hypothesis, which states, as total court-ordered monetary sanction amount increases, the reported instances of return to prison will increase, is not supported by the data in this analysis. Examination of

the models according to the second hypothesis, which states, as total court-ordered restitution amount increases, the reported instances of return to prison will decrease, is not supported by the data in this analysis. Examination of the models according to the third hypothesis which states, the total court-ordered monetary sanction amounts predict above and beyond known predictors (i.e. age, sex, race, criminal history, SES) of recidivism with regard to reported instances of resentence to prison, is not supported by the data in this analysis.

Neither having a property offense from initial prison conviction nor sociodemographic variables were found to be significant in this analysis. This finding is inconsistent with previous research concluding there is specialization in offending behaviors amongst property offenders. The U.S. Department of Justice (2016) found a higher percentage of released property offenders were arrested for a property crime (54%) than any other offender. From a strain theory perspective, this finding is also inconsistent because, as previously mentioned crime is frequently used to get money quickly to reduce strain (Agnew et al. 1996; Cernkovich et al. 2000; Colvin 2000). Property offenses are a quick way to make money for monetary sanctions and other life necessities.

Examination of the ROC curve for property recidivism shows that total court-ordered monetary sanction amount is weakly associated with property recidivism and total restitution is moderately associated with property recidivism.

In summary, logistic regression analysis revealed monetary sanction amounts have null effects on property recidivism. However, ROC curve analysis revealed total

sanction amount is weakly associated with property recidivism and total restitution

amount is moderately associated with property recidivism.

Variable Significance and Hypothesis - Violent Recidivism Models

Examination of the logistic models according to the first hypothesis, which states,

as total court-ordered monetary sanction amount increases, the reported instances of

return to prison will increase, is not supported by the data in this analysis. Examination of

the models according to the second hypothesis, which states, as total court-ordered

restitution amount increases, the reported instances of return to prison will decrease, is

not supported by the data in this analysis. Examination of the models according to the

third hypothesis which states, the total court-ordered monetary sanction amounts predict

above and beyond known predictors (i.e. age, sex, race, criminal history, SES) of

recidivism with regard to reported instances of resentence to prison, is not supported by

the data in this analysis.

The data from the logistic models show that age is significantly associated with

assault recidivism. As an offender ages, they are less likely to return to prison on an

assault charge. It is well known as offenders age, they are less likely to reoffend (Langan

and Levin 2002; May et al. 2008; Iowa Department of Corrections 2016). Additionally,

young people age 16-24 have the highest violent crime rates (U.S. Department of Justice

1994). From a strain theory perspective, Anderson (1999) argued that young males are

under much pressure to respond to one type of strain—disrespectful treatment— with

violence. As young people age, they begin to have more control over the nature of their

social world and develop positive social connections of their own choosing (Agnew

1997). In this sense, as offenders age, they can cope with strains without returning to violence.

Besides age, no other sociodemographic variables were found to be significant in this analysis. Having a violent offense from initial prison conviction was also not found to be significantly associated with violent recidivism. This is inconsistent with previous research concluding there is specialization in offending behaviors amongst violent offenders. The U.S. Department of Justice (2016) found a higher percentage of released violent offenders were arrested for a violent crime (33.1%) than any other offender. Furthermore, among prisoners released for assault, approximately 34.4 percent were rearrested for assault (U.S. Department of Justice 2016).

Examination of the ROC curve for violent recidivism shows that total sanction amount is moderately associated with violent recidivism and total restitution amount is weakly, but better than random chance, associated with violent recidivism.

In summary, logistic regression analysis revealed monetary sanction amounts have null effects on violent recidivism. However, ROC curve analysis revealed total sanction amount is moderately associated with violent recidivism and total restitution amount is weakly associated with violent recidivism. Logistic regression results showed younger offenders more likely to recidivate with an assault conviction than older offenders.

Additional Data Analysis - Days to Recidivism Model

Additional data analysis was run on the studies primary covariates, total sanction amount and total restitution amount, to see if a significant association exists with days to failure (recidivism). Examination of the negative binomial regression model revealed

both to be significant associations. From the results, it can be determined individuals with

higher amounts of monetary sanctions recidivate sooner than individuals with lower

amounts of monetary sanctions. Indicating court-ordered monetary sanctions interact with

recidivism in some fashion. Furthermore, it can be determined individuals with higher

amounts of total restitution recidivate later than individuals with lower amounts of

restitution. According to this information, restitution may act as a protective factor,

helping offenders stay out of prison longer. Indicating court-ordered restitution interacts

with the restorative justice philosophy in some fashion. Perhaps where the monetary

sanction money goes to (i.e. the government versus victim) has some effect on

recidivism.

This model also included sociodemographics and prior conviction types. No

sociodemographic variables were found to be significantly associated. Having a violent

offense from initial prison conviction was the only prior significantly associated with

days to recidivism. Indicating that individuals entering prison on a violent offense

recidivate quicker than individuals who did not. This is inconsistent with data reported by

the U.S. Department of Justice (2014) who found after six months, property offenders

were most likely to return to prison (21.8%), followed by violent offenders (16.2%), and

then drug offenders (15.4%); after one year property offenders were most likely to return

to prison (36.4%), followed by drug offenders (28.1%), and then violent offenders

(27.5%). This order continued through year five.

In summary, higher amounts of total monetary sanctions shorten time to

recidivism while higher amounts of total restitution lengthen time to recidivism. By

lengthening the time to recidivism, restitution acts as a protective factor for offenders.

The data also concluded, offenders entering prison on a violent offense recidivate quicker after release than those who entered prison on a drug or property offense.

Additional Data Analysis – Monetary Sanction and LSI-R Two-Sample T-Test Models

Additional data analysis was run on the studies primary covariates, total sanction amount and total restitution amount, and LSI-R score to see if a significant association exists with these variables and SES (determined by whether a defendant retained a public defender). Examination of two-sample t-test models revealed significant group differences in all three models.

Individuals who qualified for and retained a public defender, on average, had both significantly less total sanction amounts and significantly less total restitution amounts. Per this information, the public defenders in this sample achieved more favorable outcomes for offenders than private attorneys. The literature on attorney effectiveness is mixed. A large portion of research indicates public defenders do as well as privately retained attorneys in gaining favorable outcomes for defendants (Hanson, Ostrom, Hewitt, and Lomvardias 1992; Cohen 2014). Other research finds private attorneys achieve better outcomes than public defenders (Hoffman, Rubin, and Shepherd 2005). According to Hanson et al. (1992:103-4), "…in instances where the type of attorney does have an effect on these rates, the impact is very weak and not always in a more favorable direction toward the defendants represented by privately retained counsel."

A possible explanation for the finding in this study is that public defenders have an immense workload and therefore may have more experience than a private attorney,

giving them an upper hand on reducing monetary sanction amounts. An alternative explanation could be that judges do take into consideration the offenders' socioeconomic status and sentence indigent individuals with lower amounts of monetary sanctions.

The third model showed indigent individuals who qualified for and retained a public defender, on average, had significantly higher LSI-R scores. The LSI-R has 10 scales to determine risk/need score. One is Financial Situation (financial stability and problems). A study conducted by Manchak, Skeem, Douglas, and Siranosian (2009) found the financial scale of the LSI-R significantly predicted risk of general recidivism for both men and women. Additionally, research shows that such factors as employment problems, poverty, and low socioeconomic status are important contributors to crime (Valdez, Kaplan, and Curtis 2007). These findings contribute to the current study by concurring that offenders with high financial instability (i.e. individuals who quality for a public defender), have higher LSI-R scores and higher recidivism rates.

In summary, two-sample t-test models revealed that offenders who qualified as indigent under Iowa Code and retained a public defender had higher LSI-R scores, less total sanction amounts, and less total restitution amounts, than offenders who retained a private attorney.

CHAPTER VI

CONCLUSION

This thesis examined data from the Iowa Department of Corrections and Iowa Courts Online. The data were collected in the state of Iowa in the United States and consisted of 729 first-time prisoners; 635 males and 94 females. The aim of this thesis was to test the basic premise of general strain theory (Agnew 1992) as applied to court-ordered monetary sanctions. This thesis used logistic regression analysis, ROC curve analysis, negative binomial regression analysis, and two-sample t-test analysis to determine if total sanction amount increases the likelihood of recidivism and if total restitution amount decreases the likelihood of recidivism after first-time prisoners are released from a term of incarceration. Recidivism was defined as a return to prison over a three-year period following release. The number of offenders who have established criminal histories shows that many offenders reoffend despite contact with the criminal justice system. The statistical significance of court-ordered monetary sanction amounts not being statistically significant suggests that the current practice of deterrence is ineffective, as the threat of punishment (monetary sanctions) does not seem to deter offenders from repeating their criminal ways.

In summary, while criminal defendants are overwhelmingly poor, the findings related to the research hypotheses from this thesis show some association, but are not overwhelmingly supported. Logistic regression analysis showed neither total sanction amount nor total restitution amount to be significantly associated with drug, property, or violent recidivism defined as a return to prison over a three-year time span. However,

ROC curve analyses found total sanction amount to be weakly associated with drug recidivism and moderately associated with both property and violent recidivism. Furthermore, ROC curve analyses found total restitution amount to be weakly associated with both drug recidivism and violent recidivism and moderately associated with property recidivism. Lastly, Negative binomial regression concluded higher amounts of total monetary sanctions shorten time to recidivism while higher amounts of total restitution lengthen time to recidivism. These findings suggest some association exists between recidivism and monetary sanctions.

Further logistic analysis revealed offenders were more likely to recidivate with a drug offense if they were sentenced to prison on a drug conviction and if they were male. In addition, offenders whose initial prison conviction included a drug offense were more likely to recidivate with a drug trafficking offense than a drug possession offense, although both were significantly linked to prior drug offending. The offenders recidivating with a drug possession offense were likely to have lower LSI-R scores. Logistic regression also showed offenders recidivating with an assault offense were likely to be younger in age; negative binomial regression showed offenders entering prison on a violent offense recidivate quicker after release than those who entered prison on a drug or property offense conviction. Two-sample t-test models revealed that offenders who qualify as indigent under Iowa Code and retained a public defender had higher LSI-R scores, less total sanction amounts, and less total restitution amounts, than offenders who retained a private attorney.

Limitations and Future Research

As indicated, the results from this analysis were derived from data collected throughout Iowa in the United States on a sample of male and female offenders who were first-time prisoners. Provided the diversity of offense classification, the results of this analysis can be generalized across offender type. While women were slightly overrepresented, the results from this analysis can be generalized across Iowa. However, the results cannot be generalized across geographic areas because Iowa does not have an offender population that matches large urban areas. Future research should examine effects using a more diverse sample population collected across multiple states in the United States. Furthermore, results from this analysis cannot be generalized beyond the criteria which classified an offender as a first-time prisoner. Future research should examine effects, both restrictive to Iowa and across multiple states, using a broader population.

Additional limitations likely exist due to the inability to gather country-wide data and court expungements. During the three-year tracking period, it is probable some offenders were imprisoned in another state. Analyzing a national dataset would counteract this limitation. It is also probable some offenders have expunged cases beyond their initial prison conviction cases. These cases have been sealed, or erased in the eyes of the law, therefore making the records and court-ordered monetary sanction information unavailable. Cases are not allowed to be expunged before full payment, but some defendants may have fully paid off a case, thus allowing the expungement and restricting monetary sanction amounts from being included in analysis (Iowa Code, Chapter 901C, Section 2; Iowa Code, Chapter 907, Section 9).

Future research should expand upon how court-ordered monetary sanctions affect days to failure (recidivism) by fleshing out the differences between who pays and who does not pay their court-ordered monetary sanctions. Future research should analyze the days to recidivism rates between these two groups, specifically focusing on restitution, as restitution may be the key to lowering recidivism. Qualitative interviews could be useful in figuring out if where the monetary sanction money goes to (i.e. the government or victims) really does matter to offenders, or if some other component is allowing a restorative factor to be seen with restitution. Examining data and using this level of detail will allow for further examination of the restorative justice punishment philosophy.

Lastly, future research should more intensely examine socio-cultural factors, especially race and ethnicity. Specifically, it would be interesting to group offenders by racial categories who commit stereotype congruent crimes compared to those who do not in order to determine if there are differences in court-ordered monetary sanction amounts and recidivism outcomes. Research by Harris et al. (2011) suggests that defendants who commit stereotype congruent offense receive more severe monetary sanctions.

Future Implications

Though the results do not highlight any particularly significant effect of total court-ordered monetary sanction amounts on increasing or reducing recidivism, significant effects of total court-ordered monetary sanction amounts on days to recidivism were found. This research adds to the growing body of knowledge on the topic of criminal recidivism and shows that court-ordered monetary sanction amount is a potentially significant factor when it comes to recidivism and time to failure. No one

factor is solely a predictor of potential recidivism for offenders; it is a combination of variables that increases the risk they pose to reoffend when released from prison. Further investigation of the link these factors share would benefit legislators, all personnel in the criminal justice system, and the community. Additionally, perhaps restorative justice criminologists are onto something and further investigation of court-ordered restitution's protective factor could help reduce recidivism, bettering the lives of those persons who were incarcerated instead of solely reducing the time to recidivate.

REFERENCES

Agnew, Robert. 1992. "Foundation for a General Strain Theory of Crime and Delinquency." *Criminology* 30(1): 47-87.

Agnew, Robert. 1997. "Stability and Change in Crime over the Life Course: A Strain Theory Explanation." in *Developmental Theories of Crime and Delinquency*, vol. 7, edited by T. P. Thornberry. New Brunswick, NJ: Transaction Publishers.

Agnew, Robert. 2001. "Building on the Foundation of General Strain Theory: Specifying the Types of Strain Most Likely to Lead to Crime and Delinquency." *Journal of Research in Crime and Delinquency* 38(4): 319-361.

Agnew, Robert. 2006. *Pressured into Crime: An overview of general strain theory*. Los Angeles: Roxbury Publishing.

Agnew, Robert. 2013. "When Criminal Coping is Likely: An Extension of General Strain Theory." *Deviant Behavior* 34(8): 653-670.

Agnew, Robert, Francis T. Cullen, Velmer S. Burton, Jr., T. David Evans, and R. Gregory Dunaway. 1996. "A New Test of Classic Strain Theory." *Justice Quarterly* 13:681-704.

Alexander, Michelle. 2016. *New Jim Crow: Mass incarceration in the age of colorblindness*. New York: New Press.

Anderson, Elijah. 1999. *Code of the Street*. New York: Norton.

Andrews, D. A. and James Bonta. 1994. *The Psychology of Criminal Conduct*. New Providence, NJ: Matthew Bender & Company, Inc.

Association of State Correctional Administrators. 2015. *ASCA Performance-Based Measures System Counting Rules: Revised Counting Rules for Organization Characteristics.* Hagerstown: Association of State Correctional Administrators.

Ashworth, Andrew. 2000. *Sentencing and criminal justice*. 3rd ed. London: Butterworths.

Atkinson, Torie. 2015. "A Fine Scheme: How Municipal Fines Become Crushing Debt in the Shadow of the New Debtors' Prisons." *Harvard Civil Rights-Civil Liberties Law Review* 51:189-238.

Beck, A. J. and B. E. Shipley. 1989. *Recidivism of Prisoners Released in 1983*. Washington D.C.: U.S. Department of Justice.

Beckett, Katherine and Alexes Harris. 2011. "On cash and conviction: monetary sanctions as misguided policy." *Criminology & Public Policy* 10(3): 509-537.

Blumstein, Alfred. 1982. "On the Racial Disproportionality of United States' Prison Populations." *The Journal of Criminal Law and Criminology* 73(3):1259–81.

Botchkovar, Ekaterina V., Charles R. Tittle, Olena Antonaccio. 2013. "Strain, Coping, and Socioeconomic Status: Coping Histories and Present Choices." *Journal of Quantitative Criminology* 29: 217-250.

Braithwaite, John. 1989. *Crime, shame, and reintegration*. New York: Cambridge University Press.

Broidy, Lisa and Robert Agnew. 1997. "Gender and Crime: A General Strain Theory Perspective." *Journal of Research in Crime and Delinquency* 34(3): 275-306.

Burch, T. R. 2011. "Fixing the Broken System of Financial Sanctions." *Criminology & Public Policy* 10(3): 539-545.

Butterfield, F. 2004. "Many local officials now make inmates pay their own way." *The New York Times*, A1, A17.

Cernkovich, Stephen A., Peggy C. Giordano, and Jennifer L. Rudolph. 2000. "Race, Crime, and the American Dream." *Journal of Research in Crime and Delinquency* 37:131-70.

Chandler, Redonna K., Bennett W. Fletcher, and Nora D. Volkow. 2009. "Treating Drug Abuse and Addiction in the Criminal Justice System: Improving Public Health and Safety." *JAMA* 301(2): 183-190.

Clark, I. 1998. "The use of direct deductions from benefits in Scottish courts." *The Howard Journal* 37:291-305.

Cohen, R. 1995. *Probation and parole violators in state prison, 1991.* Washington D.C.: Bureau of Justice Statistics.

Cohen, Thomas H. 2014. "Who is Better at Defending Criminals? Does Type of Defense Attorney Matter in Terms of Producing Favorable Case Outcomes." *Criminal Justice Policy Review* 25(1): 29-58.

Colvin, Mark. 2000. *Crime and Coercion: An Integrated Theory of Chronic Criminality*. New York: St. Martin's

Council of Economic Advisers. 2015. *Fines, Fees, and Bail: Payments in the Criminal Justice System that Disproportionately Impact the Poor* (Issue Brief). Washington D.C.: Council of Economic Advisers.

Critelli, Joseph W., Ronald F. Crawford Jr. 1980. "The Effectiveness of Court-Ordered Punishment: Fines versus No Punishment." *Criminal Justice and Behavior* 7(4): 465-470.

De Coster, Stacy and Lisa Kort-Butler. 2006. "How General is General Strain Theory? Assessing Issues of Determinacy and Indeterminacy." *Journal of Research in Crime and Delinquency* 43(4): 297-325.

DeLisi, Matt, J.C. Barnes, Kevin M. Beaver, & Chris L. Gibson. 2009. "Delinquent gangs and adolescent victimization revisited: A propensity score matching approach." *Criminal Justice and Behavior* 36(8): 808-823.

DeLisi, Matt and Peter J. Conis. 2013. *American Corrections: Theory, Research, Policy, and Practice*. Second. Burlington, MA: Jones and Bartlett Learning.

Diller, Rebekah, Alicia Bannon, and Mitali Nagrecha. 2010. *Criminal Justice Debt: A Barrier to Reentry* (Report). New York: Brennan Center for Justice.

Durose, Matthew R., Alexia D. Cooper, and Howard N. Snyder. 2014. *Recidivism Of Prisoners Released in 30 States in 2005: Patterns From 2005 to 2010*. Bureau of Justice Statistics.

Eglash, Albert. 1958. "Creative Restitution: Some Suggestions for the Prison Rehabilitation Programs." *American Journal of Correction* 20: 20.

Einat, Tomer. 2004. "Criminal fine enforcement in Israel: Administration, policy, evaluation, and recommendations." *Punishment and society* 6:175-194.

Einat, Tomer. 2008. "Sentencing rationales, judicial discretion, and the practice of criminal fines in Israel." *Journal of Criminal Justice* 36(5):444–52.

Felson, Richard B., D. Wayne Osgood, Julie Horney, and Craig Wiernik. 2012. "Having a Bad Month: General versus Specific Effects of Stress on Crime." *Journal of Quantitative Criminology* 28(2): 347-363.

Gendreau, Paul, Claire Goggin, and P. Smith. 2002. Is the PCL-R really the "unparalleled" measure of offender risk? *Criminal Justice and Behavior* 29: 397-426.

Gendreau, Paul, Tracy Little, and Claire Goggin. 1996. "A meta-analysis of the predictors of adult offender recidivism: What works!" *Criminology* 34:575-607.

Goldblatt, P. and C. Lewis, eds. 1998. *Reducing offending: An assessment of research evidence on ways of dealing with offending behavior.* London: Home Office.

Gottschalk, M. 2011. "The past, present, and future of mass incarceration in the United States." *Criminology & Public Policy* 10(3): 483-504.

Gupta, Vanita and Lisa Foster. 2016. *Dear Colleague Letter Regarding Law Enforcement Fees and Fines.* Washington D.C.: U.S. Department of Justice.

Hanson, Roger A., Brian J. Ostrom, William E. Hewitt, and Christopher Lomvardias. 1992. *Indigent Defenders: Get the Job Done and Done Well*. Williamsburg, VA: National Center for State Courts.

Harris, Alexes, Heather Evans, and Katherine Beckett. 2010. "Drawing Blood from Stones: Legal Debt and Social Inequality in the Contemporary United States." *AJS* 115(6): 1753-1799.

Harris, Alexes, Heather Evans, and Katherine Beckett. 2011. "Courtesy Stigma and Monetary Sanctions: Toward a Socio-Cultural Theory of Punishment." *American Sociological Review* 76: 234-264.

Heinz, J., B. Galaway, and J. Hudson. 1976. "Restitution or Parole: A Follow-up Study of Adult Offenders." *Social Service Review* 50: 148-156.

Hillsman, S. and J. A. Greene. 1992. "The Use of Fines as an Intermediate Sanction." Pp. 123-141 in Smart Sentencing: The Emergence of Intermediate Sanctions, edited by J. M. Byrne, A. J. Lurigio, and J. Petersilia. Newbury Park, CA: Sage.

Hoffman, Morris B., Paul H. Rubin, and Joanna M. Shepherd. 2005. "An Empirical Study of Public Defender Effectiveness: Self-Selection by the 'Marginally Indigent'." *Ohio State Journal of Criminal Law* 3:223-255.

Hoffmann, John P. 2004. *Generalized linear models: an applied approach*. Boston, MA: Pearson Education.

Hosmer, David W., Stanley Lemeshow, and Rodney X. Sturdivant. 2013. *Applied logistic regression*. Hoboken, NJ: John Wiley & Sons.

Iowa Department of Corrections. 2016. *Research in Brief: Prison Recidivism FY2016.* Des Moines, IA: State of Iowa Department of Corrections. Retrieved March 9, 2017 (https://doc.iowa.gov/data/prison-recidivism-fy2016).

Iowa Department of Corrections. 2017. *December 2016 Quick Facts*. Retrieved on March 9, 2017 (http://publications.iowa.gov/id/eprint/23344).

Iowa Department of Corrections. n.d. "What is Offender Reentry?" Retrieved March 13, 2016 (http://www.doc.state.ia.us/offenderrentry).

Iowa Judicial Branch. 2016. "Pay Fines: Common Questions about Paying Fines Online and Paying Late or Overdue Fines." Retrieved November 15, 2016 (http://www.iowacourts.gov/wfdata/frame8623-1121/#What_is_court_debt).

Jacob, Bruce R. 1970. "Reparation or Restitution by the Criminal Offender to His Victim: Applicability of an Ancient Concept in the Modern Correctional Process." *The Journal of Criminal Law, Criminology, and Police Science* 61(2): 152-167.

Judicial Branch. 2013. *Accounts Receivable Report.* Retrieved on March 11, 2016 (https://www.legis.iowa.gov/docs/publications/DF/662390.pdf).

Katzenstein, Mary F. and Mitali Nagrecha. 2011. "A new punishment regime." *Criminology & Public Policy* 10(3): 555-568.

King, Ryan and Brian Elderbroom. 2014. *Improving Recidivism as a Performance Measure*. Washington DC: Urban Institute.

Klein, R. A. 1997. *Alternative sentencing, intermediate sanctions and probation.* Cincinnati, OH: Anderson.

Langan, Patrick A. and David J. Levin. 2002. *Recidivism of prisoners released in 1994*. Washington DC: U.S. Dept. of Justice, Office of Justice Programs, Bureau of Justice Statistics.

Legislative Services Agency. 2009. *Criminal Fine Revenue and Surcharge Distribution.* Retrieved March 15, 2017 (https://www.legis.iowa.gov/docs/publications/FT/10573.pdf).

Legislative Services Agency. 2014. *Court Debt Collection Programs and Outstanding Court Debt*. Retrieved March 2, 2017 (https://www.legis.iowa.gov/docs/publications/IR/25246.pdf).

Listwan, Shelley Johnson, Christopher J. Sullivan, Robert Agnew, Francis T. Cullen, and Mark Colvin. 2013. "The Pain of Imprisonment Revisited: The Impact of Strain on Inmate Recidivism." *Justice Quarterly* 30(1): 144-168.

Manchak, S.M., J.L. Skeem, and K.S. Douglas. 2008. "Utility of the Revised Level of Service Inventory (LSI-R) in predicting recidivism after long-term incarceration." *Law and Human Behavior* 32: 477-488.

Mani, Anandi, Sendhil Mullainathan, Eldar Shafir, and Jiajying Zhao. 2013. "Poverty Impedes Cognitive Function." *Science* 321: 976-980.

Maruna, Shadd. 2001. *Making good: How ex-Convicts reform and rebuild their lives*. Washington, D.C.: American Psychological Association.

May, Chris, Nalini Sharma, and Duncan Stewart. 2008. *Factors linked to reoffending: a one-year follow-up of prisoners who took part in the Resettlement Surveys 2001, 2003, and 2004.* Ministry of Justice.

McLean, Rachel L. and Michael D. Thompson. 2007. *Repaying Debts*. New York: Council of State Governments Justice Center.

Merton, Robert K. 1938. "Social Structure and Anomie." *American Sociological Review* 3(5): 672-682.

Miethe, Terance D. and Hong Lu. 2005. *Punishment: A Comparative Historical Perspective*. Cambridge: Cambridge University Press.

Morris, N. and M. Tonry. 1990. *Between prison and probation: Intermediate punishments in a rational sentencing system*. New York: Oxford University Press.

National Council on Alcoholism and Drug Dependence, Inc. 2015. "Alcohol, Drugs, and Crime." Retrieved March 15, 2017 (https://www.ncadd.org/about-addiction/alcohol-drugs-and-crime).

National Institute of Justice. 2014. "Recidivism." Retrieved December 2, 2016. (http://www.nij.gov/topics/corrections/recidivism/pages/welcome.aspx)

O'Malley, Pat. 2011. "Politicizing the case for fines." *Criminology & Public Policy* 10(3): 547-553.

Perez, Evan. 2016. "DOJ warns against jailing poor people for not paying court fines." Retrieved November 9, 2016 (http://www.cnn.com/2016/03/14/politics/court-fines-poor-people-doj).

Prell, Lettie. 2006. *ICON Data Download: LSI-R Assessment is Valid for Iowa Offenders.* Des Moines: Iowa Department of Corrections.

Rabury, Bernadette and Daniel Kopf. 2015. *Prisons of Poverty: Uncovering the pre-incarceration incomes of the imprisoned.* Retrieved December 2, 2016 (https://www.prisonpolicy.org/reports/income.html).

Rhode Island Department of Corrections. 2011. *Level of Service Inventory – Revised: A Portrait of RIDOC Offenders.* Retrieved on March 10, 2017 (http://www.doc.ri.gov/administration/planning/docs/LSINewsletterFINAL.pdf).

Ruback, R. Barry. 2002. *Restitution in Pennsylvania: A Multimethod Investigation*.

Ruback, R. Barry. 2004. "The Imposition of Economic Sanctions in Philadelphia: Costs, Fines, and Restitution." *Federal Probation* 68(1): 21-26.

Ruback, R. Barry. 2011. "The abolition of fines and fees." *Criminology & Public Policy* 10(3): 569-581.

Rusche, Georg and Gerda Dinwiddie. 1978. "Labor Market and Penal Sanction: Thoughts on the Sociology of Criminal Justice." *Crime and Social Justice* 10: 2-8.

Rusche, Georg and Otto Kirschheimer. 1939. *Punishment and social structure*. New York: Columbia University Press.

Shah, Anuj K., Sendhil Mullainathan, and Eldar Shafir. 2012. "Some Consequences of Having Too Little." *Science* 338: 682-685.

Shapiro, Joseph. 2014. "As Court Fees Rise, The Poor Are Paying the Price." Retrieved March 12, 2016. (http://www.npr.org/2014/05/19/312158516/increasing-court-fees-punish-the-poor).

Smith, B. E. and S. W. Hillenbrand. 1997. "Making victims whole again: Restitution, victim-offender reconciliation programs, and compensation." Pp. 231-244 in *Victims of Crime*. 2nd ed, edited by R.C. Davis, A.J. Lurigio, and W. Skogan. Thousand Oaks, CA: Sage.

Statista. 2016. "Number of people per household in the United States from 1960 to 2015." Retrieved December 3, 2016 (https://www.statista.com/statistics/183648/average-size-of-households-in-the-us/).

Tittle, Charles R. and Robert F. Meier. 1990. "Specifying the SES/delinquency Relationship." *Criminology* 28:271-299.

Tittle, Charles R. and Robert F. Meier. 1991. "Specifying the SES/delinquency relationship by social characteristics of contexts." *Journal of Research in Crime and Delinquency* 28:430-455.

Uglow, S. 1995. *Criminal justice.* London: Sweet and Maxwell.

U.S. Department of Health & Human Services. 2012. "Computations for the 2012 Annual Update of the HHS Poverty Guidelines for the 48 Contiguous States and the District of Columbia." Retrieved December 3, 2016 (https://aspe.hhs.gov/computations-2012-annual-update-hhs-poverty-guidelines-48-contiguous-states-and-district-columbia).

U.S. Department of Justice. 1994. "Violent Crime." Retrieved March 16, 2017 (https://www.bjs.gov/content/pub/pdf/VIOCRM.PDF).

U.S. Department of Justice. 2002. "Ordering Restitution to the Crime Victim." Retrieved January 12, 2017 (https://www.ncjrs.gov/ovc_archives/bulletins/legalseries/bulletin6/ncj189189.pdf).

U.S. Department of Justice. 2016. "Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010." Retrieved March 16, 2017 (https://www.bjs.gov/content/pub/pdf/rprts05p0510_st.pdf).

Valdez, Avelardo, Charles D. Kaplan, and Russell L. Curtis, Jr. 2007. "Aggressive crime, alcohol and drug use, and concentrated poverty in 24 U.S. urban areas." *American Journal of Drug and Alcohol Abuse* 33: 595-603.

Western, Bruce. 2006. *Punishment and Inequality in America.* New York: Russell Sage Foundation.

Wooditch, Alese, Liansheng Larry Tang, and Faye S. Taxman. 2014. "Which Criminogenic Need Changes are Most Important in Promoting Desistance from Crime and Substance Use?" *Criminal Justice and Behavior* 41(3): 276-299.

Wright, Valerie. 2010. *Deterrence in Criminal Justice: Evaluating Certainty vs. Severity of Punishment*. Washington D.C.: The Sentencing Project.

Zimmer, Markus. 2013. "From the Executive Editor: The Dark Side of Court and Justice System Budgeting in Hard Times." *International Journal for Court Administration* 5(2).

Zimring, F. E. and Gordon Hawkins. 1995. *Incapacitation: Penal Confinement and the Restraint of Crime*. New York: Oxford University Press.

STATUTES CITED

Constitution of the State of Iowa, Article 1, Section 17.

Iowa Code, Chapter 356, Section 7.

Iowa Code, Chapter 692A, Section 110.

Iowa Code, Chapter 815, Section 9.

Iowa Code, Chapter 901C, Section 2.

Iowa Code, Chapter 905, Section 14.

Iowa Code, Chapter 907, Section 9.

Iowa Code, Chapter 909, Section 2.

Iowa Code, Chapter 909, Section 7.

United States Constitution, Amendment 8.

COURT CASES CITED

Bearden v. Georgia, 461 U.S. 660 (1983).

Cooper Industries v. Leatherman Tool Group, 532 U.S. 424 (2001).

Fuller v. Oregon, 417 U.S. 40 (1974).

Tate v. Short, 401 U.S. 395 (1971).

United States v. Bajakajian, 524 U.S. 321 (1998).

APPENDIX A: IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
2420 Lincoln Way, Suite 202
Ames, Iowa 50014
515 294-4566

Date:	10/6/2016			
To:	Jennifer Tostlebe		**CC:**	Dr. Matt DeLisi
	▬▬▬▬▬▬			203A East Hall
	Ames, IA			
From:	Office for Responsible Research			
Title:	The debt prison: How monetary sanctions affect recidivism			
IRB ID:	16-441			

Approval Date:	10/4/2016	**Date for Continuing Review:**	10/3/2017
Submission Type:	New	**Review Type:**	Full Committee

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.**

- **Retain signed informed consent documents for 3 years after the close of the study,** when documented consent is required.

- **Obtain IRB approval prior to implementing <u>any</u> changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form,** as necessary.

- **Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences** involving risks to subjects or others; **and (2) any other unanticipated problems involving risks to subjects or others.**

- **Stop all research activity if IRB approval lapses,** unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.

- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. **Approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **IRB approval in no way implies or guarantees that permission from these other entities will be granted.**

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 202 Kingland, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.

APPENDIX B: DOC APPROVAL FOR DATA

STATE OF IOWA

Fields of Opportunities

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF CORRECTIONS
JERRY W. BARTRUFF, DIRECTOR

August 29, 2016

Jennifer J. Tostlebe

Ames, Iowa 50014

RE: Providing ICON Data for your Master's Thesis

Dear Ms. Tostlebe:

I am approving the provision of data from the Iowa Corrections Offender Network (ICON) to support your academic work toward your Master's Thesis regarding offender recidivism and outstanding court debt. Specifically, I approve the following information be provided to you:

- Our recidivism database for state fiscal year 2012, which contains releases from prison or work release to parole, special sentence or discharge and whether or not the offender returned to prison for any reason within three years of release. The file contains demographic information.
- The case numbers, jurisdiction and offender name information necessary for you to gather the additional information necessary for your research from the Iowa Courts On-Line.

Please continue to work with research director Lettie Prell to obtain the data after your university's institutional review board has approved your research.

Sincerely,

Jerry W. Bartruff
Director

The mission of the Iowa Department of Corrections is:
To advance successful offender reentry to protect the public, staff and offenders from victimization.

(Office) 515-725-5701 - 510 East 12th Street, Des Moines, Iowa 50319 - (FAX) 515-725-5798

www.doc.state.ia.us