Assessing the Impact of Post-Release Community Supervision on Post-Release Recidivism and Employment

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ABSTRACT

The shift from indeterminate to determinate sentencing policies over the past three decades and the ensuing decline in the use of parole for monitoring inmates' transition back into their communities, led to the development of alternate strategies of post-prison release supervision. The use of parole varies considerably across the United States, with some states (i.e., Oregon) requiring that all inmates released from prison be subject to supervision after release from incarceration. In contrast others, such as Florida, mandate the post-release supervision of those offenders who meet a statutorily defined list of criteria, while still allowing for the post-incarceration supervision of offenders who may have been sentenced to an additional sanction of community supervision (e.g. split supervision) to immediately follow their prison sentence. To date, the empirical literature that has examined forms of post-prison release supervision have focused almost exclusively on the use of parole. There is extensive literature relating to various forms of community supervision among offenders diverted from imprisonment, however, there remains a lack of understanding regarding the various effects of split supervision on prisoner reentry employment outcomes for released inmates.

This paper adds to the literature on post-prison release community supervision by examining the effect of two separate forms of post-prison supervision on offender recidivism and employment outcomes: split supervision and conditional release supervision. Using data from the Florida Department of Corrections (FDC), this study examines the effects of split supervision and conditional release supervision in comparison to release from prison with no form of supervision for a cohort of 201,447 inmates released from Florida prisons between January 2004 and December 2011. Survival analysis, logistic regression, precision matching, and propensity score matching (PSM methods are used to examine multiple recidivism outcomes at one, two,

and three years after release from incarceration, as well as to predict the likelihood of obtaining employment after release from prison. Findings indicate that post-prison supervision is a significant predictor of reduced recidivism outcomes (rearrest and conviction) among Florida inmates, as well as increasing the odds of offenders obtaining employment after release from prison, compared with those inmates who are released with no supervision after incarceration. These findings, however, are mitigated by the significantly increased likelihoods of returning to prison and rearrest for a felony for inmates placed on post-prison release supervision. Research findings and conclusions for future research, as well as policy implications of the study findings are discussed.

INTRODUCTION

Until the late 1980s and early 1990s, parole was the dominate form of post-prison release supervision used by corrections agencies in the United States. Generally ascribed to Alexander Maconochie and Sir Walter Crofton, parole was developed in the mid-1800s as a disavowal of the punitive nature of the penal system that characterized the era. In the U.S., Michigan penologist Zebulon Brockway is credited with implementing the first parole system, based on the system developed by Sir Crofton in Ireland (for a detailed review of the history of parole see Petersilia, 2000a; 2000b). Parole quickly gained popularity in the U.S. and by 1942 each state and the federal prison system had instituted a parole system (Clear & Cole, 1997). However, the use of parole as a prisoner release strategy peaked in the late 1970s when states began to question its usefulness. At its peak in 1977, 72% of inmates in the U.S. were released to parole (Bottomly, 1990), but by 1997 only 28% of inmates were being released to parole (Ditton & Wilson, 1999). While researchers and statisticians have captured the nature of this shift – from supervising large portions of released inmates to the reverse where large portions of inmates are released back into communities with no formal supervision or monitoring by correctional agencies – the question of what impact this important change has had on the reentry success of inmates has yet to be sufficiently addressed by criminologists.

The use of post-prison release supervision[1] varies between jurisdictions; with Florida releasing the highest proportion of inmates with no supervision following incarceration (Gelb, Dhungana, Adams, McCann, & Zafft, 2014). This variation among inmates released without

[1] A report by the Pew Charitable Trusts on the increase in inmates released without supervision to follow incarceration does not distinguish between types of post-prison release supervision. The comparison made is between "max-outs" (defined as unconditional releases and including offenders who were released at the expiration of their sentence, had their sentence commuted, and other unconditional releases) and supervised releases (including offenders released to probation, supervised mandatory releases, discretionary parole releases, those released to split supervision, and other conditional releases) (see Gelb, et al., 2014: 14-15).

supervision after incarceration is partially explained by the use of parole across jurisdictions. Beginning in the 1980s, many states began changing their sentencing practices from indeterminate systems in which parole was the dominant prison release mechanism with an emphasis on rehabilitation as a recidivism reduction strategy to more determinate "get-tough" policies in which parole eligibility was eliminated or restricted to specific offenders (Tonry & Lynch, 1996; Petersilia, 1999). This policy change resulted in significant reductions in the number of ex-prisoners under any form of post-release community supervision, which would provide both oversight and restrictions on their activities. States such as Oregon and California that reflect near complete supervision of prison releases also utilize parole as a post-prison supervision strategy, while the states with the lowest levels of post-prison supervision (Florida and Maine) have eliminated parole (Gelb, et al., 2014). Parole is still used in almost all states to varying degrees. In some states such as New Mexico, Idaho, and Louisiana, parole is the sole post-prison release supervision type while in other states such as Florida, Maryland, and Maine parole is used for a limited number of offenders who meet certain statutory guidelines. The prevalence of the use of split supervision and conditional release for prison releases is less clear (Bureau of Justice Statistics (BJS), n.d.). At best estimate, it appears that split supervision (defined as a secondary term of supervision to follow a period of incarceration) is used in seven states: Alabama, Connecticut, Florida, Rhode Island, South Carolina, Virginia, and Washington. Conditional release (defined as the statutorily mandated release of inmates to community supervision after serving a minimum period of incarceration) is used in three states: Florida, Missouri, and Montana (BJS, n.d.).

This study will empirically address the question of whether post-prison release community supervision affects recidivism and employment outcomes for inmates. The results

directly confront the policy debate over the role of community corrections as both a tool to ease the transition of inmates back into the community and as a means for deterring criminal behavior through monitoring and sanctions. To date there has been only one study that has examined the impact of split supervision on recidivism (Spivak & Damphousse, 2006) and no research has been found that examines the effect of conditional release supervision on recidivism. Results from studies examining the effectiveness of parole have been mixed, with some finding positive influences of parole (Gelb, et al., 2014; Ostermann, n.d.; Piehl & LoBuglio, 2005; The PEW Charitable Trusts, 2013) and others finding that parole increases the likelihood of reoffending (Jackson, 1983; Solomon, Kachnowski, & Bhati, 2005).

This study seeks to advance relevant prior research literature in a number of ways. First, it contributes to the literature by empirically examining post-prison release supervision strategies that are alternatives to parole. To date the literature in this area has focused almost exclusively on the use of parole, and there are few empirical evaluations of alternate community supervision sanctions. Due to Florida's diverse sentencing structure, this study is able to evaluate two different types of post-prison release supervision: split supervision and conditional release supervision. By considering the type of supervision that an inmate is required to serve after release from prison, we will be able to assess whether there are differential effects of the form of supervision that is imposed. Second, the single study of split supervision used data from Oklahoma, while the studies that have examined the effects of parole release supervision have been primarily focused on prison populations in New Jersey and California. By using a population of inmates released from Florida's large state prison system, this study will provide additional empirical evidence to add to the generalizability of research findings more broadly within the literature. Third, by using multiple measures of recidivism (rearrest, reconviction, and

reimprisonment) as well as measures of employment after release from prison[2], this study will advance the literature by providing for a more specific consideration of the potential effects of post-release supervision on reoffending and reentry outcomes.

Florida is a prime example of a state which has transformed its system of punishment over the past three decades. Specifically, parole was eliminated in 1983 and in 1995 Florida enacted the requirement that all offenders sentenced to prison serve a minimum of 85% of the court-imposed sentence (Bales, Gaes, Blomberg, & Pate, 2010). As a result, two-thirds of all inmates released from prison in Florida are under no form of post-release supervision (Florida Department of Corrections (FDC), 2013b). Of the one-third of released inmates who are supervised after release, approximately one-half are ordered by the court to serve a term of probation or community control (house arrest) upon release. The remaining one-half of inmates released with supervision were mandated by Florida law to serve a length of time under supervision equal to the amount of gain-time earned while incarcerated, i.e., the time they would have served in prison if no reduction of time served in prison had occurred.

This paper begins by examining the nature of post-prison supervision in Florida, as well as the existing post-prison supervision literature to provide background information and the current state of the research in this area. It will make use of relevant findings to develop and answer research questions concerning the effects of post-prison supervision on recidivism and post-release employment outcomes. Finally, directions for future research as well as policy implications will be discussed.

POST-RELEASE SUPERVISION IN FLORIDA

[2] Employment after prison release is measured as whether the inmate was employed within the first quarter of release from prison.

During the late 1970s and into the 1980s an increase in crime rates across the U.S. (Stemen, 2007) and the resulting media reaction to the perceived "crime wave" encouraged many in both the public and political spheres to conclude that significant changes in the criminal justice and correctional systems were needed in order to gain control over crime, which was seen as an increasingly significant social problem (Anderson, 1995). These trends were reflected in criminal justice policies at both the national and state levels, with policy makers emphasizing "tough on crime" and determinate sentencing policies. Notably, Florida shifted its sentencing policy from indeterminate to determinate starting in the 1980s as a means to reduce criminal offending. One consequence of this shift was a significant reduction in the number of offenders released from prison with supervision to follow their incarceration.

Florida's switch from indeterminate to determinate sentencing occurred largely over the course of a decade, with the changes occurring in three significant stages (see Bales, et. al., 2010 for a more in-depth review). The first major change in Florida's sentencing policy was the implementation of sentencing guidelines and the elimination of parole in 1983. Beginning in 1983, offenders who had an offense date on or after October 1, 1983 were no longer eligible to receive parole release[3]. This marked a significant policy change, as in 1980 over 60% of inmates were paroled (Bales, et al., 2010). Within a decade the number of inmates released to parole supervision in Florida had been reduced to less than 1% (Bales, et al., 2010).

[3] Several modifications to the sentencing guidelines occurred during the 1990s. Currently, only inmates who meet the following criteria are eligible for parole: 1) they were convicted of any felony prior to October 1, 1983, or they elected to be sentenced "outside the guidelines" for felonies committed prior to July 1, 1984; 2) they were convicted of a murder of a justice or judge prior to October 1, 1990; 3) they were convicted of a murder of a law enforcement officer (and other specified officers) prior to January 1, 1990; 4) they were convicted of engaging in a continuing criminal enterprise (violation of 893.20, F.S.) prior to June 17, 1993; 5) they were convicted of all other capital felonies prior to October 1, 1995; or 6) they were convicted of a first degree murder, a felony murder, or the crime of making, possessing, throwing, projecting, placing, or discharging a destructive device (or the attempt of) prior to May 25, 1994. Of the inmate population in Florida, less than 6,000 individuals are eligible for parole (FDC, n.d.).

The second stage of Florida's move from indeterminate to determinate sentencing occurred in 1994 with an update to the sentencing guidelines that were enacted in 1983. Part of the 1983 sentencing guidelines involved allowing inmates to earn substantial amounts of gain time (a reduction in the amount of time served in prison on a sentence traditionally earned by complying with prison rules, completing work assignments, etc.) while incarcerated, which "resulted in inmates serving a minimum of only 40% of their court-imposed sentence in prison" (Bales, et al., 2010: 44). In 1994 lawmakers in Florida revised the sentencing guidelines structure by eliminating the basic gain time provision, which had effectively allowed inmates to reduce their sentences by one-third. By December of 1994 early release credits[4] were discontinued entirely, due in part to the reduction in prison admissions and Florida's massive prison building efforts (FDC, n.d.). In 1995 the final move towards determinate sentencing was made when Florida lawmakers passed a provision (known as the "85% law") that mandates all individuals with offenses committed on or after October 1, 1995 who have been sentenced to prison serve a minimum of 85% of their sentence. This law remains in effect in Florida today.

While the implications of determinate sentencing and the policies enacted that move a government from indeterminate to determinate sentencing strategies merit much interest and debate (Stemen & Rengifo, 2012; Stemen, Rengifo, & Wilson, 2005) an important aspect of this discussion is how the changes in these policies have impacted supervised populations, particularly in Florida. As was previously mentioned, under the indeterminate sentencing policies of the 1980s Florida supervised the majority of prison releases with parole supervision (Bales, et al., 2010). However, even a decade later as the first stage of determinate sentencing policies came into effect there was a significant change in the post-prison supervision population

[4] Up to this point early release credits were being issued to offenders under the Control Release program. Eligible offenders were released from prison to Control Release supervision based on early release credits.

with less than one percent (0.7%) of inmates being released to parole supervision (Bales, et al., 2010). Parole releases have dropped even more dramatically in recent years: from July 2013 through June 2014 there were a total of 27 inmates released to parole supervision or 0.08% of the released population (FDC, 2014b). Yet while the use of parole as a post-release supervision strategy has significantly decreased since the implementation of determinate sentencing policies in Florida, alternate means of supervising inmates in the community have been used. Two primary forms of post-prison release supervision, namely split supervision and conditional release, will be discussed here.

The form of post-release supervision used in Florida that is most comparable to parole is conditional release. In order to be considered for conditional release supervision an inmate must have been convicted of at least one of a list of defined offenses (such as murder, manslaughter, sex offenses, robbery, or violent personal crimes) and have served at least one prior felony commitment in a state or federal prison, or have been determined to be a habitual offender, violent habitual offender, violent career criminal, or sexual predator by the court (see Florida Statute 947.1405 for full requirements)[5]. If determined to be eligible for conditional release, the Florida Commission on Offender Review (formerly the Florida Parole Commission) sets the length and conditions of supervision to which the inmate must comply.

Conditional release supervision differs from parole in two significant ways. First, as a result of the 85% law, inmates that are eligible to receive conditional release *must* serve at least 85% of their sentence before being eligible to serve any portion of the remaining 15% in the

[5] A secondary form of conditional release, known as conditional medical release, allows for the release of permanently incapacitated or terminally ill inmates who have not been sentenced to a capital offense. In this instance, if the Florida Commission on Offender Review (formerly the Florida Parole Commission) determines that an inmate is eligible for conditional medical release, the term of supervision will be for the remainder of the sentence for which the inmate is currently incarcerated. Supervision must include periodic medical evaluations at intervals determined by the Commission, and if an inmate's condition is determined to have improved, he/she can be revoked from conditional medical release and returned to prison (see Florida Statute 947.149 for further details).

community on supervision. This is in contrast to parole supervision (as it is typically implemented in states other than Florida), where inmates are eligible to serve much lengthier portions of their sentence in the community once deemed eligible for release. In 2012, state prisoners served a median length of 28 months for a violent offense, 12 months for a property offense, and 13 months for a drug offense (Carson & Golinelli, 2013). A 2011 study by the National Conference of State Legislatures determined that 44 states used some form of sentence credit law (good-time or earned-time) which allow inmates to reduce the amount of time spent incarcerated on their prison term (The National Conference of State Legislatures, 2011). Additionally, in 2009 the median sentence length for all offenses in the United States was 36 months, while the median time served in prison was 16 months and the median time served on parole was 18 months (BJS, 2011).

A second way in which conditional release is different than traditional parole is that only certain inmates are eligible to receive conditional release, and once determined to be eligible they must be released to community supervision; in other words, unlike the majority of parole releases, there is little discretion in the release decision. According to the 2014 Bureau of Justice Statistics report "Probation and Parole in the United States, 2013" approximately 43% of all parole admissions in 2013 were discretionary, while only 25% of admissions were due to mandatory release[6], where the release decision was not the result of a parole board decision (Herbermann & Bonczar, 2014: 19). In Florida, in contrast with the predominant national parole release policy, the conditional release decision is not discretionary and is instead subject to a specific set of guidelines determined by statute.

[6] The remaining 32% of parole admissions are due to reinstatement, an inmate being released to a term of supervised release (where an inmate has been sentenced to a fixed term of incarceration to be followed by a term of community supervision), other causes, or the release decision being unknown or not reported.

The second form of post-prison release supervision used in Florida is split supervision. Split supervision differs from parole primarily in that it is an additional sanction to the initial term of incarceration. An offender who is sentenced to incarceration for either a misdemeanor or felony offense[7] can be placed on a term of split supervision at the time of sentencing (see Florida Statute 948.012 for full details). Generally the imposition of a split sentence is at the discretion of the sentencing judge, however in certain instances a split sentence may be statutorily required[8]. Offenders may be sentenced to a term of probation (including sex offender probation and drug offender probation) or community control after release from prison.

PRIOR LITERATURE

In recent years, corrections agencies have shown a renewed interest in post-release supervision strategies in the community (Cheliotis, 2009). Surprisingly, the empirical research testing various prison release strategies is almost non-existent. Most of the research pertaining to post-release supervision is either descriptive (Arkowitz, Shale, & Carabello, 2008), or theoretical (Steiner, 2004). The empirical literature on post-release supervision has generally focused on one specific area, such as parole or electronic monitoring (for examples see Bales, et al., 2010; Ostermann, n.d.; Solomon, Kachnowski, & Bhati, 2005; SPEC Associates, 2002). Research examining the effectiveness of various post-release supervision strategies on recidivism and employment are limited.

[7] Capital offenses are not eligible for split supervision.

[8] For offenders sentenced after September 01, 2005 the court must impose a split sentence for any person convicted of a life felony for lewd and lascivious molestation if the court imposes a term of years rather than a life sentence. In this instance probation or community control (house arrest) must extend for the duration of the offender's natural life and must also include a condition requiring electronic monitoring [see F.S. 948.012(4)]. For offenders sentenced after October 01, 2014 and convicted of certain sexual offenses, if the court imposes a term of years less than the maximum sentence for the offense then the court must impose a split sentence for a minimum of two years or the remainder of the maximum sentence [see F.S. 948.012(5)].

While research has attempted to understand the nature of supervised release for offenders on parole, there has been only one study to date that has examined the effects of imposing a secondary or "split" supervision sentence to follow a term of incarceration. The research on the effects of post-release supervision has almost exclusively examined offenders released on parole, resulting in little understanding of the nature of post-prison release to more traditional forms of community supervision, such as probation and community control.

In an examination of the predictors of recidivism among released inmates, Spivak and Damphousse (2006) conduct the only empirical analysis, to date, of split supervision. The researchers attempted to predict offenders' post-prison release recidivism (measured as a return to prison during the follow-up period after release from incarceration) for a cohort of 46,172 inmates released from the Oklahoma Department of Corrections between January 1, 1985 and December 31, 1999. Of the 60,536[9] releases, 26.8% (16,230) were released to split probation, 17.5% (10,617) were released to parole, and 55.7% (33,689) were released with no supervision to follow their term of incarceration. The overall recidivism rate for all released inmates was 48.1% (29,144 returns to prison), not controlling for any covariates. The variables for release type (dichotomous measures of release to parole versus release with no supervision to follow and release to split probation versus release with no supervision to follow) were included in three of the five models that predict the hazard of recidivism (using Cox proportional hazard regression models).

The researchers found that across models both release to parole and release to split probation increased the likelihood of recidivism, and that release to split probation was a

[9] There are more releases than individual inmates because some inmates were released, recidivated back to prison, served a new term of incarceration, and were released a second time during the observation period (see pg. 64 for a description of the sample and data). In this study the authors count each individual release as a separate case.

stronger predictor of recidivism than parole. For example, when controlling for offense type, prior history, release type, and custody level at release, inmates who were released to parole had a 7.1% increased hazard of recidivism (compared to those who were released with no supervision to follow), while those who were released to split probation sentences had an 11.5% increased hazard of recidivism[10]. When adding additional controls for prior incarcerations, whether the inmate was sentenced to life, sentence length, time served, the proportion of time served, and education level, the hazard of recidivism for parolees increased to 11.8% while the hazard of recidivism for those released to split probation was 19.8%. Finally, the full model (which included all of the previous covariates plus additional controls for demographic characteristics) showed that the hazard of recidivism for inmates released to parole was 9.7% while the hazard of recidivism for inmates released to split probation was 16.6%. While this study was not a direct test of the effects of split probation and conditional release, it does provide insight into the likely (negative) effects of these forms of post-prison release supervision on the recidivism outcomes of offenders. Meaning that it appears that inmates released with post-release supervision, and especially those with split supervision, have a greater likelihood of returning to prison compared with inmates who are released with no supervision to follow their incarceration.

A second study that is relevant to the understanding of the nature of split probation supervision was conducted by Talarico and Myers (1987), and discusses the importance of split supervision from aspects other than recidivism. In this paper the researchers consider two empirical assumptions: that the use of split sentencing had increased over time, and that judges emphasized the importance of the total term (total length of prison incarceration plus supervision

[10] All effects were statistically significant at the $p<0.001$ level.

length) as a more consequential factor than the severity of the sentence (the term of imprisonment) when determining how to sentence offenders.

The researchers hypothesized that judges use split supervision sanctions as a way of responding to problems with overcrowding in the prison system and as a response to public outcries for more punitive sanctioning of offenders. Using data collected from site visits to eleven circuit courts in Georgia, the researchers found that there was support for the hypotheses that use of split sentencing had increased over time (from 1976 through May of 1985) and that, "split sentences in Georgia are likely to be longer for violent or more serious offenders, as well as for offenders who are white, unemployed, or from rural backgrounds" (Talarico & Myers, 1987: 626). Finally, the researchers determined that the severity of the split sentence (as measured by the ratio of incarceration length to supervision length) is greater for more serious offenders and for those who have longer split sentences, prior records, and who are white or are younger (Talarico & Myers, 1987).

The present study will address a neglected area of research by examining whether having any form of post-release supervision, an additional term of split supervision (felony probation, drug offender probation, sex offender probation, or community control), or a term of conditional release supervision influences recidivism and employment outcomes for released inmates, and whether the length of post-release supervision plays a role in preventing recidivism. Additionally, multiple methodologies will be used (survival analysis, logistic regression, precision matching, and propensity score matching) to determine whether and to what extent evaluation outcome studies of correctional practices and policies are influenced by the type of research design and statistical methods used.

The Status of Analogous Research

While sometimes conflated, it should be noted that split supervision differs from the concept of alternative or intermediate sanctioning. Specifically, split sentences reflect an *additional* sanction of community supervision (often probation or house arrest) to be served consecutive to a period of incarceration in prison. Alternative sanctions, on the other hand, may include "intensive probation, substantial fines, community service orders, residential controls, treatment orders, - [and] tend at present to draw more from those who otherwise would be placed on unenforced probationary supervision or on suspended sentence" (Morris & Tonry, 1990: 4). Split supervision is substantively different - and should be evaluated separately - from parole and "shock probation."

Parole

Research examining the effectiveness of parole supervision for released inmates has typically found mixed results. For example, a recent study by The PEW Institute found that post-release supervision (those released to parole supervision as compared to those who "maxed out" or served their full sentence in prison) was effective at reducing the likelihood of rearrest, particularly for serious, violent, and high risk offenders (Gelb, et al., 2014). These findings were particularly salient within the first months of release: the first few months post-prison release are when former inmates are at the greatest risk for reoffending, however supervision (in this case parole) was found to be an effective tool at mitigating this risk (Gelb, et al., 2014). Other recent evaluations of parole have focused on the neighborhood context of parolees' reentry into communities, such as the repercussions of concentrations of parolees in areas with high poverty levels (Grattet, Petersilia, & Lin, 2008; Hipp, Petersilia, & Turner, 2010; Hipp & Yates, 2009; Lin, Grattet, & Petersilia, 2010). A report by the National Research Council on parole and desistance from crime (2008) called for more research into the nature of parole supervision. The

report concluded that there are simply no clear answers as to the relationship between parole and desistance from crime, in part, because of the largely poor methodological quality of prior studies.

Split probation supervision is substantively different from parole in one key way: the sentencing authority for released prisoners remains with the sentencing judge. In places such as Florida that no longer use parole as a prison release strategy (except in limited cases, as previously discussed), judges who view inmates as being unlikely to successfully transition back into the community may be more likely to impose split sentences as a means to ensure formal control over the inmate after release. Therefore split sentences may, in theory, act as an indicator of more serious offenders or those individuals with a higher likelihood of reoffending. Similarly, split sentencing may act as an indicator of a judge's punitiveness; variations across court circuits may reflect responses to the perceived public demand of sanctioning of criminals. For parolees, the revocation authority remains with the department of corrections (typically a parole board) from which the inmate was released.

Shock Probation

While split supervision has been sometimes considered the same as "shock probation", it is a separate subject worthy of independent study. "Shock probation" is typically a short period of incarceration (less than three months) followed by a term of probation (Talarico & Myers, 1987). Split probation, however, is generally the addition of a probation term to a period of incarceration of at least one year. To date the research on post-prison release supervision has typically conflated split supervision, parole, and shock probation as relatively indistinguishable forms of supervision. It is our argument that they are, in fact, independent and representative of

distinct sentencing policies and include substantively different categories of offenders with important variations in how successful these policies will be at reducing recidivism.

THE PRESENT STUDY

The objective of the current study is to provide insight into the role that post-prison supervision plays in offender reentry into the community as measured by recidivism and employment outcomes. We examine the effects of an inmate receiving any form of post-prison supervision, a term of split supervision, or a term of conditional release supervision for inmates released from all Florida prisons between 2004 and 2011. This study addresses the lack of research examining outcomes of post-prison release supervision (excluding parole) by providing the second empirical evaluation of the effects of split supervision on recidivism for released inmates. Additionally, by using multiple forms of post-prison supervision, the current study allows for the comparison across supervision types to determine if different forms of post-release supervision have differential effects on both recidivism and employment outcomes. Third, this study provides a needed addition to the prior literature by using multiple analytical techniques to assess whether the study design and statistical methodology influences results. Fourth, this study will provide additional understanding of the ways in which post-prison supervision impacts reentry outcomes for offenders by using a cohort of inmates released from Florida prisons, which has the third largest correctional system in the U.S. Finally, by including multiple outcome measures of recidivism as well as a measure of employment after release from prison, this study will advance the literature by allowing for a more specific understanding of the ways in which post-prison release supervision influences offender reentry.

Research Questions

In order to assess the effect of post-prison supervision on reentry outcomes for Florida inmates, this study will address the following research questions:

1. What is the impact of post-release supervision on employment and recidivism?
2. Do various types of post-release supervision result in different outcomes of employment and recidivism?
3. How does the length of post-release supervision impact employment and recidivism?

METHODOLOGY

Data

This section of the report provides an explanation of the sources and contents of the data used in the analysis of the impact of post-prison release supervision on post-prison recidivism and employment. Three sources provided the data required to create the measures described in this report. First, corrections data was derived from the FDC's Bureau of Research and Data Analysis (BRDA). Second, the data which resulted in the creation of measures of pre- and post-prison arrests were provided by the Florida Department of Law Enforcement (FDLE). Third, the pre- and post-prison employment data was accessed through the Florida Department of Revenue (FDR). We begin this section with a brief explanation of the creation of the data set used for the analyses, a description of the three data sources, and then provide details relating to each of the measures used in the subsequent data analyses conducted.

Building the FDC and FSU Researcher-Practitioner Partnership Recidivism Dataset

This section begins with a description of the BRDA's development and use of recidivism datasets on an annual basis. The BRDA began building annual post-prison recidivism research datasets for analysis and reporting purposes in the mid 1980's. These files have been used by the FDC to produce annual reports to document changes in post-prison recidivism in Florida, to report what factors are most influential on post-prison recidivism, to conduct special analyses

relating to the predictors of recidivism, and to complete various requests from policy makers and practitioners. The most recent FDC annual recidivism report is based on a cohort of inmates released from Florida's prisons from 2005 to 2012 (FDC, 2014a).

During initial meetings between the FDC and FSU research partners, it was determined that the recidivism dataset used to conduct the analyses that resulted in the report, "2012 Florida Prison Recidivism Report: Releases from 2004 to 2011" (FDC, 2013a), would be used as the basis of the analyses for the three major projects the two research units agreed to complete as part of the NIJ funding. Therefore, the initial phase of the project involved the FSU research team becoming familiar with the recidivism dataset. This was followed by numerous meetings and sharing of information relating to the BRDA's warehouse of research data to identify datasets in the SAS repository that would be used to build a comprehensive recidivism analysis file that would be used to conduct the requisite studies and to build the BRDA's capacity to complete recidivism analyses in numerous other areas after the partnership project was completed.

Importantly, while most of the dialogue and correspondence that occurred relating to identifying the appropriate independent, control, and dependent variables to quantify and include in future analysis was between FSU and the BRDA's research staff, it also involved numerous meetings with subject area experts at the FDC. Specifically, FSU and BRDA research staff had numerous meetings with experts at the FDC's Central Office to learn about each of the topical areas to be studied, i.e., substance abuse treatment, work release, and post-prison supervision. These meetings began as opportunities for the FSU researchers to learn more about the FDC's programs and their processes, the types of questions the practitioners were interested in having answered through the research, and the forms of data and measures the research partners should

access. In later stages of the research project when the datasets were developing, additional meetings were held with the subject matter experts, in which FSU and BRDA staff presented the measures and plans for analyzing the data. This proved to be invaluable because the FDC staff held insights into the meaning of the data that informed how we were able to measure and quantify practices, concepts, and outcomes.

While the Principal Investigator on the FSU research team, Bill Bales, was involved in the development of the BRDA's SAS data warehouse and worked with OBIS data for 15 years, he left the FDC for FSU just over 10 years prior to when this project began, therefore, along with the other research staff, he needed to become familiar with the current contents of the data warehouse. After the FSU research team became familiar with the contents of the extensive research data repository, they developed a document that detailed the datasets and data fields they believed would be needed to expand the measures on the current BRDA recidivism dataset in order to conduct the analyses for the NIJ partnership projects. The BRDA then supplied a host of datasets to the FSU research team relating to prison programming, movements in and out of the correctional system, disciplinary infractions, and sentencing events. These datasets were merged with the core recidivism file of all inmates released from 2004 to 2011 to develop the independent, control, and dependent variables described below.

While there were 250,803 cases in the initial core recidivism dataset, the following details the attrition of cases and the size of the final analysis dataset. There were 25,571 cases in this dataset that were either sentenced to prison in another state or released to a state other than Florida or to another country. These cases were eliminated because the recidivism measures of rearrest, reconviction, and reimprisonment rely exclusively on Florida data. The recidivism rates of these cases were examined and found to be extremely low relative to cases that were

sentenced and released in Florida. Another set of 2,151 cases were removed from the dataset due to the fact that, while the offender was sentenced from a Florida court to serve a prison term in Florida, they never actually entered the prison system. The specific reasons behind these instances is not known, however, the logical reason is that pursuant to state law offenders sentenced to prison receive credit for time served in local jail pretrial and these cases likely served enough time in jail prior to sentencing to satisfy the entirety of the prison sentence. The final criterion for excluding cases from the analyses dataset was due to missing data on one or more variables in the multivariate analysis. These included four variables: custody level at prison release, education tested grade level (TABE), substance abuse dependence, and the number of prior arrests. These variables were found to be highly predictive of post-prison recidivism and employment and so the decision was made that, while 23,785 cases were eliminated from the analysis, these measures were considered too critical as control variables to be excluded from the analysis.

Given that our data set encompasses an eight year timeframe of all prison releases in Florida, from 2004 to 2011, it was unsurprising that a number of inmates were released from incarceration and returned to prison on one or more occasion during our study period. Our final data file contains 171,933 individual inmates with unique identifiers, and a total of 201,447 releases from prison. For the purposes of this study, we are considering our unit of analysis to be the movements from prison and not individual inmates.

Corrections Data

The corrections data from the BRDA originates from the FDC's Offender-Based Information System (OBIS). The OBIS database, established in 1979, contains detailed data on all offenders who were in Florida's correctional system in 1979, and all subsequent offenders

sentenced to state prison or community supervision (probation, community control, etc.). OBIS contains the sentencing information recorded on the Sentence and Judgment Form completed by the court when an offender is convicted, comprehensive data relating to the demographic characteristics of offenders, specific data on all inmate movements within and in-and-out of prison, and related to community supervision movements and outcomes (absconding, technical violations, new offenses, and revocations), and initial and all subsequent custody classification decisions. Additionally, all entries, exits, and outcomes associated with prison-based substance abuse and other programs are recorded in OBIS along with details relating to disciplinary infractions, visits by family or friends, and information related to custody classification such as educational and substance abuse needs. To facilitate the tracking of individual offenders over time, the FDC utilizes a unique offender identifying number that remains constant throughout the system and over the course of each individual offender's criminal career in the state of Florida. There is also data relating to additional unique personal identification numbers such as the number assigned to arrestees by the FDLE when they are booked into a local jail, social security number, and FBI number.

In 1996, the BRDA built a SAS data warehouse of research files that are extracted from OBIS and contains detailed information relating to prison and supervision admissions, releases, and status populations. This data repository now comprises over 200 research files that contain event-based files such as prison movements, supervision gains and losses, disciplinary infractions, and prison and supervision program information, among others. Additionally, composite files that contain numerous variables on specific types of offenders based on their contact with the FDC, such as active prison or supervision populations and admissions and releases from prison or supervision, are contained in the SAS data warehouse and updated

routinely. These files can be linked using the offender identification number and are routinely used by the FDC and external researchers to build cohorts of offenders released from prison and community supervision.

Pre- and Post-Prison Arrest Data

Guidance on the measures of post-prison recidivism comes from a series of multi-state recidivism reports generated by the U.S. Department of Justice, Bureau of Justice Statistics (e.g., Durose, Cooper & Snyder, 2014) which include arrest, conviction and return to prison as recidivism outcomes. The source of both pre- and post-prison arrest data for this study was the FDLE, which created the Computerized Criminal History (CCH) data system several decades ago. This data system contains detailed information on all arrests in Florida in which the suspect was fingerprinted at a local jail facility. The Florida Statistical Analysis Center (FSAC) at the FDLE maintains a SAS data warehouse of all of the CCH data (Burton, et al., 2004). The BRDA and FSAC have shared data for several years, and in doing so have developed an accurate method of ensuring that the resulting matching of arrest and corrections data is based on the same individuals who are in their respective databases.

The accuracy of the matching process is facilitated by the fact that the two data systems are populated with the unique individual identifiers used by each agency to track multiple entries into the state correctional system, including both prisons or community corrections offices, and arrests at the local level. For the creation of the data set that was used in the analyses included in this study, the BRDA provided FSAC with all of the relevant individual identifying variables, such as last name, first name, gender, race, FDLE number, FDC number, FBI number, date of birth, and Social Security number for each record in their 2004 to 2011 inmate recidivism file. The FSAC then matched the data to their CCH repository and provided the resulting dataset to

FDC. Prior to sharing this file with their research partners at FSU, BRDA staff encrypted the FDC offender unique identification numbers and eliminated all personal identifying information, such as last name, first name, and Social Security number, in order to ensure the anonymity of each individual in the dataset.

Employment Data

The source of pre- and post-prison release employment data is the Florida Department of Revenue (FDR). This agency collects State of Florida employment data which contains each year and quarter in which individuals are employed, wages earned, and public assistance status. The individual identifier contained in the FDR data warehouse is the social security number, which is also contained in the FDC's OBIS. Using this identifier, inmates in the 2004 to 2011 reentry cohort were able to be matched to the FDR data, and from this measures of pre-incarceration employment and post-prison release employment were created.

Variables

Independent Variables

This study will use multiple measures of post-prison release supervision. In order to address the first question a measure of any post-prison release supervision was used to account for the effect of inmates who are released from incarceration under any number of supervision strategies (including split probation, split community control, conditional release, and to a limited extent, parole, among others). This dichotomous measure of post-prison release supervision allows for the analysis of whether supervision after release from prison in any form has significant effects on recidivism and employment for released inmates.

In order to address the second research question two additional measures were created. While there are a number of types of post-prison release supervision to which offenders in

Florida may be released, the majority of inmates are either released to conditional release supervision or are sentenced to serve a term of split supervision following their incarceration. To that end, the first measure that addresses the various types of post-release supervision that an inmate may serve is for split probation/community control. This variable includes all inmates who were sentenced to a term of split supervision, including split felony probation, split drug offender probation, split sex offender probation, and split community control. The second measure is for conditional release supervision. This variable includes all inmates who were released from prison to a period of conditional release.

In order to address the third research question the final two measures were created. First, the length of supervision, in years, is considered for inmates sentenced to a term of split probation or community control. Second, the length of supervision, in months, is considered for inmates released to a term of conditional release supervision. The variables incorporate different measures of time on supervision (years versus months) because of the differences in average time on supervision for each form of post-release supervision. Specifically, because inmates who are placed on conditional release supervision are only serving a maximum of 15% of their original sentence in the community (accounting for the 85% mandatory minimum time that must be served incarcerated, in accordance with Florida's determinate sentencing laws, as previously discussed), the average period of conditional release supervision is generally short, averaging less than 12 months. Split supervision, on the other hand, is an additive sanction imposed by a judge at the time of sentencing. Terms of split supervision are typically much longer than conditional release and average approximately three years. Because of the varied nature of each type of supervision, the use of different measurements of sentence length is most appropriate in order to allow for greater variation in the populations.

Control Variables

There are numerous factors that have been shown to be empirically linked to differences in the likelihood that released prisoners will recidivate, which are listed in Table 1 and described in more detail below. We control for the demographic characteristics of gender, race, and age, which have consistently been shown to be strong predictors of recidivism (Bales & Mears, 2008; Beck & Shipley, 1987; Langan & Levin, 2002). These include sex (male=1, female=0), three dichotomous variables capturing race and ethnicity of white (1=white/non-Hispanic, 0=non-white), black (1=black/non-Hispanic, 0=white), Hispanic (1=Hispanic, 0=black/non-Hispanic or white/non-Hispanic), and age at prison release as a continuous variable in years. Education level is measured through the results of the Test of Adult Basic Education (TABE). Inmates may take this test, which determines the equivalent grade level the inmate has achieved based on their reading, writing, and math proficiencies at that time, multiple times during their incarceration. For the purposes of this study, the score from the TABE exam which was administered most recently prior to the inmates' release date was used.

Whether inmates have substance abuse dependency problems is determined through the Drug Simple Screening Instrument (DSSI) and is operationalized as having a physical or psychological dependency (=1) or not (=0). There have been several studies which have examined the link between mental illness and recidivism and have found mixed results (Baillargeon, Binswanger, Williams, & Murray, 2009; Bonta & Hanson, 1998; Grann & Fazel, 2008). The variable psychiatric diagnosis at prison release (0=no, 1=yes) is based on if the inmate's latest mental health evaluation resulted in a psychiatric diagnosis which required some type of medication. If the inmate was assessed by the FDC to be a suspected or confirmed gang member (0=no, 1=yes) was an important control variable based on findings from prior research

that has found a positive influence of this affiliation with recidivism (Huebner, Varano, & Bynum, 2007; Dooley, Seals, & Skarbek, 2014). Whether the inmate was employed during first full quarter prior to their admission to prison (0=no, 1=yes) is included as a control variable along with the number of tattoos an inmate has (Bales, Blomberg, & Waters, 2013).

The most serious type of crime which resulted in offenders being imprisoned and their prior criminal record has been associated with reentry outcomes (Bales & Mears, 2008; Langan, Schmitt, & Durose, 2003; Putnins, 2005). Therefore, the most serious crime which resulted in a conviction and sentence to prison is measured through dummy variables (0=no,1=yes) based on nine different crime types of murder/manslaughter, sex offenses, robbery, other violent offenses, burglary, property, drugs, weapons, and other miscellaneous offenses. While a host of prior criminal record measures were available to use in the models, due to multicollinearity problems when including all of them in the analysis, we selected four measures that had the greatest influence on recidivism and were not collinear. These include the number burglary convictions in the five years preceding prison admission, the number of theft convictions in the five years preceding admission, total number of prior arrests, and the number prior Florida prison admissions.

The effect of the length of stay in prison on recidivism explored in prior studies have found from mixed results (Beck & Shipley, 1987; Langan, et al., 2003), positive effects (Visher, Lattimore, & Linster, 1991), and negative relationships (Bales & Mears, 2008; Beck & Shipley, 1997). Therefore, time served in prison in months is included in the analysis. Custody level at release was measured through dummy variables (0=no, 1=yes) for inmates released with a community custody level, medium/minimum custody level, or close (representing the most severe restrictions on movement and privileges) custody level. Institutional adjustment as

indicated by violations of institutional rules and resulting infractions has been found to influence post-prison offending behavior (Chen & Shapiro, 2007; Kohl, Hoover, McDonald, & Solomon, 2008; Mears & Bales, 2009). Measures of institutional adjustment included whether inmates had one or more disciplinary infraction within 365 days of their prison release (0=no, 1=yes) and the total number of infractions per month served in prison (Bales & Mears, 2008). Provided that research has demonstrated that inmates who are visited in prison and those who are visited more often have significantly lower recidivism rates (Bales & Mears, 2008) we include a measure of the number of visits inmate received per month served.

Finally, for two reasons, we include dummy variables reflecting the year inmates were released from prison during our cohort period of 2004 to 2011. First, this eight year span of all prison releases provides a unique opportunity to control for changes in policies and practices related to prisoner reentry that are not directly measurable. Second, the "Great Recession" in the U.S. began in December 2007 and ended in June 2009 (U.S. Bureau of Labor Statistics, 2012). The Recession occurred in the middle of our cohort period and the dire economic conditions and in particular high unemployment rates, especially among minorities and young males, may have some influence on post-prison employment and recidivism.

[INSERT TABLE 1 HERE]

Dependent Variables

Tables 2 and 2a describe the dependent variables used in the analyses. The recidivism measures related to arrest events were derived from the FDLE arrest data. These data include the date of each arrest event and the type of charge(s). These data were used to determine whether an individual was arrested for any crime (felony or misdemeanor, excluding technical violations of supervision) after release from incarceration, and if they were arrested solely for a felony

offense (excluding technical violations of supervision). Multiple measures of arrest were used to distinguish between those who were arrested for any reason, and those who were arrested for more serious offenses (felonies). Additionally, these variables were created as close approximations of the arrest measures used in the Bureau of Justice Statistics' most current recidivism report "Recidivism of prisoners released in 30 states in 2005: Patterns from 2005 to 2010" (Cooper, Durose & Snyder, 2014). The recidivism measure capturing a conviction for a felony crime was obtained from the FDC's "component" dataset which contains detailed data on every convicted charge for a felony in Florida which results in a sentence to state prison or some form of community supervision. The recidivism measure which indicates a return to Florida's prison system for any reason was obtained from the FDC's "prison movement" dataset which contains a record for every movement resulting in an entry into or an exit from a Florida prison. These records contain the movement date and the reason for the movement, such as whether it was a new sentence or a technical violation of supervision.

[INSERT TABLES 2 AND 2a HERE]

Analytical Techniques

Survival and Logistic Regression Modeling

First, Cox Regression Proportional Hazards Models, i.e., "survival analysis" is used to examine the effect of our independent variables of any post-prison supervision, split probation/community control, and conditional release supervision compared to those inmates released with no supervision to follow incarceration (see, Allison, 1995). This method measures the probability of recidivism (rearrest, reconviction, and reimprisonment) and the time to failure across the two groups. Second, logistic regression models, which is an appropriate multivariate modeling technique when the outcome variables is dichotomous, such as whether recidivism

occurred (0=no,1=yes), are created to estimate the impact of treatment, i.e., post-prison release supervision, on employment, rearrest, reconviction, and reimprisonment within one, two, and three years after prison release (see, Allison, 1999).

Precision (Exact) Matching

Precision (or exact) matching is one method available for researchers who are trying to improve causal inference, but who cannot randomly assign people to receive a sanction due to ethical and practical constraints. Also known as "variable-by-variable" matching (Nagin, Cullen, & Jonson, 2009), this method selects cases within the treatment and control group where the values of each matching variable are identical. Those cases that do not match precisely are pruned from the analysis. Cases that remain and match across the treatment and control groups are made equivalent in their attributes. The only measured difference between these groups is the treatment, sanction, or condition of interest. While this method is characterized as a "foolproof way of controlling for potentially confounding variables" (Nagin, et al., 2009: 145), there are some issues associated with using it (Selltiz, Jahoda, Deutsch, & Cook, 1959). First, there needs to be an adequate initial case size so that enough variables can be incorporated in the matching process. The more variables that are used to match on, the greater the reduction in the number of cases available for analysis. A second problem occurs when the addition of more variables to match on leads to diminishing returns (Selltiz, et al., 1959). As variables are added, fewer matches can be identified. Because matching is only as beneficial as the variables included in the matching procedure, the third issue is that many data sources do not have an adequate number of relevant factors to incorporate in the matching procedure, thereby making the treatment and control groups less comparable.

Propensity Score Matching

Propensity Score Matching (PSM) is another common technique used to infer causality in an observational study. This technique was originally developed by Rosenbaum and Rubin (1983) and is now commonly used in many different fields including health, economics, as well as in psychological and sociological applications. The propensity score is the conditional probability of selection into the treatment or control group given a set of covariates, and is used either to construct matches or as a weight in contrasting the treatment and control conditions. The application of PSM to sanction-based research has become prominent in the criminal justice and correctional literature, and can be applied to the likelihood of receiving post-prison release supervision (Apel & Sweeten, 2010; Nagin, et al., 2009). The specific type of propensity score matching that was used in these analyses include nearest neighbor matching using a 0.05 caliper.

RESULTS

Tables 3 and 4 show the descriptive statistics for inmates released with any type of post-prison supervision to follow incarceration (n=64,223), those released with only split probation (including felony probation, drug offender probation, and sex offender probation) or community control (n=51,929), those released on conditional release supervision (n=7,454), and those inmates who were released from prison with no supervision to follow their incarceration (n=137,224). Inmates released to any type of post-prison supervision and those released on split probation/community control supervision had significantly lower rates of arrest for any misdemeanor or felony offense, arrest for a felony, and conviction for a felony offense. However, they also had significantly higher mean rates of returning to prison compared to inmates released with no supervision to follow incarceration[11]. Inmates released to conditional

[11] Mean differences for inmates released to any post-prison supervision were higher than those released with no supervision, and only reached a significance level of $p<0.10$ for arrest for a felony at one year. Those released to split probation/community control did not have statistically significant mean rates of arrest for a felony at one year compared to inmates released with no supervision to follow. All other results were significant at the $p<0.001$ level.

release supervision had somewhat different results; those offenders with conditional release supervision to follow incarceration had significantly higher rates of arrest for any misdemeanor or felony offense, arrest for a felony, but significantly lower rates of conviction for a felony offense[12]. Table 3 also shows that inmates placed on any type of post-prison supervision and those on split probation/community control supervision have significantly higher rates of employment after prison release, while those on conditional release supervision have significantly lower rates of employment after release compared to inmates released with no supervision to follow incarceration.

Table 4 shows the means and mean differences of the control variables included in the analyses for each of the primary independent variables. First, it should be noted that there are statistically significant differences between the means of each of the independent variables (any post-prison supervision, split probation/community control, and conditional release supervision) and the control group of inmates released from prison with no supervision to follow on virtually every control variable (see Table 4 for full findings). Results indicate that those released with a term of post-prison supervision are significantly more likely to be male, white,[13] older, and to be sentenced for a more serious offense (e.g., murder/manslaughter, sex offenses, robbery, other violent offenses), and to be serving a significantly longer term of incarceration than those with no supervision to follow prison.

Inmates with a term of post-prison supervision show significantly better institutional adjustment with lower number of disciplinary reports (DRs), both overall and within the 365

[12] Mean differences for inmates released to conditional release supervision only reached a significance level of $p<0.05$ for arrest for a felony at anytime (survival analysis "censored" variable). All other results were significant at the $p<0.001$ level.

[13] Except conditional release supervision, which has a significantly smaller mean rate of white offenders (36.8%) compared to those with no supervision to follow (42.8%).

days prior to release, and are visited significantly more often than those with no supervision to follow[14]. Finally, measures of prior history and inmate characteristics indicate that those released to post-prison supervision have significantly more prior convictions for burglary and theft[15], are significantly more likely to be a suspected or confirmed gang member, have significantly higher mean psychiatric diagnoses at release[16], have significantly greater substance abuse need[17], as measured by their DSSI score, and are employed significantly less prior to prison admission than those with no supervision to follow incarceration.

[INSERT TABLES 3 AND 4 HERE]

We first assess the effects of receiving post-prison supervision on recidivism (arrest for any crime, arrest for a felony, conviction, and return to prison) using Cox proportional hazard regression (survival) modeling. Table 5[18] shows several important findings. First, the results for those released to any type of post-prison supervision and those released to a split probation/community control term of supervision are similar both in direction and magnitude of effect size across all four recidivism measures. Second, inmates released to conditional release supervision generally have significantly higher hazards of recidivism, with the exception of conviction, at anytime. Third, the positive effects of post-prison supervision on arrest for any crime are reversed when considering only arrests for felony offenses. For example, those with split probation/community control are 13.2% less likely to be arrested for a misdemeanor or

[14] Except conditional release supervision, which has a significantly smaller mean rate of visitation (1.6%) compared to those with no supervision to follow (29.1%).
[15] Except conditional release supervision, which shows a significantly smaller mean number of prior theft offenses (0.240) compared to those with no supervision to follow (0.925).
[16] Except split probation/community control, which is not statistically significantly different from those with no supervision to follow.
[17] Except conditional release, which is not statistically significantly different from those with no supervision to follow.
[18] Tables 5 through 17 report only the primary interactions with no control variables shown. Full results are available upon request.

felony, while they are 7.9% *more* likely to be arrested for a felony. These seemingly conflicting findings may be due to offenders on supervision being more likely to be arrested for a more serious offense (felony versus misdemeanor) as a result of their supervision; in other words, the act of being on supervision may cause an arresting officer to be more likely to charge someone with a felony over a misdemeanor due to supervision being seen an indicator of serious offending. Fourth, the finding that offenders on post-prison supervision are more likely to be returned to prison for any reason is consistent with prior research (Spivak & Damphousse, 2006).

[INSERT TABLE 5 HERE]

Table 6 shows the results of the length of time on both split probation/community control (in years) and conditional release supervision (in months) on each of the four recidivism outcomes, using survival analysis. For both split supervision and conditional release, longer sentences result in a significant reduction in the hazard of arrest for any crime, arrest for a felony[19], and conviction. However, similar to findings in Table 5, the odds of returning to prison are increased. Importantly, these effect sizes are substantially smaller (0.9% for split supervision and 2.6% for conditional release) compared to those reported in Table 5 (69.4% and 82.1%, respectively), indicating that sentence length partially mitigates the likelihood of returning to prison for these offenders.

[INSERT TABLE 6 HERE]

The next step of the analysis was to consider the effects of any post-prison supervision, split probation/community control, and conditional release on post-prison employment and each of the recidivism outcome measures at one, two, and three years after release using logistic regression modeling. Tables 7, 8, and 9 report these findings. Similar to the findings in Table 5,

[19] Not statistically significant for conditional release supervision.

several conclusions can be drawn from these tables. First, consistent with survival analysis, the results and effect sizes for any post-prison supervision and split probation/community control are similar. Both groups show significantly reduced odds of arrest for any crime and conviction at one, two, and three years and significantly increased odds of arrest for a felony and return to prison at one, two, and three years. Additionally, both groups show significantly greater odds of being employed after release from prison (12.7% and 11%, respectively) compared to inmates released with no supervision to follow.

Inmates released to conditional released supervision have significantly greater odds of arrest (for any crime and for a felony) and of returning to prison at one, two, and three years after release from prison. However, the odds of conviction are significantly lower at one (30.3%), two (37.8%), and three years (43%) compared to those with no supervision to follow. Additionally, inmates on conditional release supervision have an 18% greater odds of being employed within the first quarter after release.

[INSERT TABLES 7, 8 AND 9 HERE]

Tables 10 and 11 report the findings for length of time on both split probation/community control (in years) and conditional release supervision (in months) on post-prison employment and each of the four recidivism outcomes at one, two, and three years after release from prison, using logistic regression modeling. The findings are again, consistent across both methodologies in terms of direction and effect size. For example, longer periods of both split supervision and conditional release result in significantly reduced odds of being arrested for any crime at one, two, and three years after release from incarceration.

There are some notable differences, however. Table 10 shows that, while length of time on split supervision does reduce the odds of conviction, the findings are not statistically

significant until three years after release. For each additional year of split supervision the odds of returning to prison are 2.1% lower at one year after release. Additionally, while post-prison employment does reach statistical significance for offenders on longer terms of split supervision, the effect size is not substantial (1.9% greater odds of being employed in the first quarter after release for each additional year of supervision). Table 11 shows that while the direction of the effect of length of time on conditional release has not changed for both conviction and return to prison, the significance of the effect sizes has changed when using logistic regression modeling. Conviction is only significant at the $p<0.05$ level at two and three years after release from prison, while the odds of returning to prison are significant at the $p<0.001$ level at two and three years after release. Finally, Table 11 shows that for each additional month of conditional release, offenders are more 3.5% more likely to be employed after release from prison.

[INSERT TABLES 10 AND 11 HERE]

In order to assess the reliability of the multivariate findings matching procedures were used next in analyzing the effects of post-prison supervision on recidivism and employment. Tables 12, 13, and 14 report the effects of any post-prison supervision, split probation/community control, and conditional release on post-prison employment and each of the four recidivism outcome measures at one, two, and three years after release using precision (or exact) matching. In these analyses the cases are matched on the treatment variable (any post-prison supervision, split probation/community control, and conditional release) using a host of covariates[20] in order to approximate randomization of cases into the treatment and control (e.g., no supervision to follow incarceration) groups.

[20] Matched covariates are not presented in the tables. Full results are available upon request.

Results show that findings, particularly for inmates released to any form of post-prison supervision and those on split probation/community control supervision, are consistent across multiple methodologies. For example, in Table 12 the odds of being arrested for any crime at one year are reduced by 17.1%, by 18.1% at two years, and by 19.6% at three years for inmates released to any type of post-prison supervision. Findings are similar for inmates released to split probation/community control (Table 13), however, unlike survival and logistic regression, the matched models for inmates released to conditional release supervision (Table 14) do not reach a level of statistical significance for arrest for any crime at one, two, or three years. This may be due to the fact that the number of cases which were able to be matched dropped substantially (e.g., from 144,678 to 3,426 at one year).

[INSERT TABLES 12, 13 AND 14 HERE]

The final set of analyses examine the effects of receiving any post-prison supervision, split probation/community control, and conditional release on post-prison employment and each of the four recidivism outcome measures at one, two, and three years after release using Propensity Score Matching (PSM). In these analyses the cases are matched on their propensity to receive treatment (any post-prison supervision, split probation/community control, and conditional release) using a host of covariates[21] in order to approximate randomization of cases into the treatment and control (e.g., no supervision to follow incarceration) groups.

Consistent with previous results, Tables 15, 16, and 17 report similar findings to analyses using other methodologies (survival, logistic regression, and precision matching). Inmates released to any post-prison supervision (Table 15) and those released to split probation/community control (Table 16) are significantly less likely to be arrested for any crime

[21] Matched covariates are not presented in the tables. Full results are available upon request.

and less likely to be convicted at one, two, and three years after release, while they are also more likely to be arrested for a felony offense, and be returned to prison during the same follow up periods. Additionally, these inmates are more likely to be employed within the first full quarter after release from incarceration. Inmates released to conditional release supervision (Table 17), however, are significantly more likely to be arrested for a new crime at three years[22], be arrested for a felony at one, two, and three years after release, and be returned to prison at one, two, and three years after release. They are also significantly less likely to be convicted during the same follow up period. Post-prison employment is no longer statistically significant (Table 17).

[INSERT TABLES 15, 16, AND 17 HERE]

DISCUSSION

The purpose of this study was to assess the various impacts that post-prison supervision has on recidivism and employment outcomes for inmates released from Florida prisons. Additionally, we aimed to determine if the type of post-release supervision and/or the length of time spent on post-release supervision created differential impacts among offenders.

The first research question guiding this work examined whether post-release supervision impacted recidivism and post-prison employment outcomes for a cohort of released inmates. Findings indicate that inmates released to any form of post-prison supervision are approximately 11-20% less likely to be arrested for any crime (felony or misdemeanor, excluding technical violations of supervision) and 30-44% less likely to be convicted for a felony offense after release from incarceration. Inmates placed on any type of post-prison supervision are also more likely to be employed within the first quarter after release from incarceration, compared to those released with no supervision to follow. However, these positive findings are mitigated by the

[22] Results at one and two years post-prison release are not statistically significant.

negative effects of supervision on arrest for a felony and return to prison. Those with any term of post-prison supervision are 7-20% more likely to be arrested for a felony and 67-360% more likely to be returned to prison after release from incarceration than those with no supervision to follow. The significant increase in likelihood of reimprisonment is likely due, at least in part, to the nature of supervision: those who are supervised can be returned to prison for technical violations in addition to being returned as a result of a new sentence. Our measure of reimprisonment includes all movements into the Florida prison system, and thus does not isolate those offenders who are returning to prison as a result of a violation of supervision. This is an important limitation in our study, and will be discussed below.

The second research question guiding this work examined whether the type of post-prison supervision (split probation/community control or conditional release) impacted recidivism and employment outcomes in different ways. Examining different types of post-prison supervision was important to this study as split supervision and conditional release supervision represent different release decisions. Inmates are placed on split supervision as a result of a judicial sentencing decision while those released to conditional release supervision have met certain statutory requirements and are automatically released by the FDC to supervision for the remainder of their prison term. As a result, it was expected that these two forms of post-prison supervision would result in different post-prison reentry experiences (as measured through recidivism and employment outcomes).

Findings indicate that there are important differences between inmates released to split supervision and those placed on conditional release supervision in terms of their employment and recidivism outcomes. First, inmates placed on split probation/community control are significantly less likely to be arrested for any crime while those on conditional release

supervision are more likely to be arrested. Second, while inmates released to both split supervision and conditional release have lower likelihoods of conviction and increased likelihoods of arrest for a felony and reimprisonment, the effects are slightly worse for those on conditional release supervision.

For instance, Table 8 shows that inmates placed on split probation/community control are 365.2% more likely to return to prison at one year, 173.9% more likely at two years, and 124.9% more likely at three years, compared to those with no supervision after incarceration. However, Table 9 shows that inmates released on conditional release supervision are 404.3% more likely to return to prison at one year, 174.5% more likely at two years, and 127.3% more likely at three years, compared to those with no supervision after incarceration. While substantively these results are the same, being placed on post-prison supervision significantly increases the likelihood of returning to prison, at each point in time the likelihood of reimprisonment is greater for those on conditional release supervision than it is for those on split probation/community control.

Third, variations exist between inmates placed on split supervision and those on conditional release supervision in terms of their likelihood of obtaining employment within the first quarter after release from incarceration. Those released to split supervision show an increased likelihood of employment after incarceration, which is consistent across multiple methods (logistic regression, precision matching, and PSM). The consistency of findings imparts confidence that these results reflect a true effect of split supervision on post-prison employment. However, the same is not true for those placed on conditional release supervision. Table 9 shows an 18% greater odds of being employed after release, but when more stringent statistical methods are used (precision matching and PSM) the findings are reversed and are no

longer significant. Overall, the findings would indicate a positive effect of post-prison supervision on employment for released inmates, but only for those on split supervision.

The third research question examined the effect of length of supervision on employment and recidivism for offenders on post-release supervision. To answer this question we compared the length of supervision (in years) for offenders on split supervision, as well as the length of supervision (in months) for offenders on conditional release. Results show that for each additional year of split supervision, the odds of arrest for a new crime, arrest for a felony, and conviction are all significantly reduced. While the odds of returning to prison are still significantly greater for those with split supervision, shorter terms of supervision appear to mitigate the likelihood of failure. In other words, while the likelihood of returning to prison at anytime for those on split supervision is nearly 70%, it only increases by 0.9% for each additional year of supervision. Therefore, the odds of returning to prison are greatest for those with very long terms of supervision.

Finally, this study employed multiple statistical methods for two primary reasons. First, the nature of the outcome measures dictated that more than one statistical method must be used to conduct the analyses. While recidivism measures (arrest for any crime, arrest for a felony, conviction, and return to prison) were available as continuous measures with clear event dates (i.e., the date of arrest from the FDLE data file, as described previously), the same was not true for the employment outcome. Our measure of post-prison employment could only be captured as a dichotomous variable, and thus was most appropriately analyzed using logistic regression. However, because more information was available for the recidivism measures it was appropriate to use both survival analysis and logistic regression to consider not only whether an offender recidivated, but whether the treatment (post-prison supervision) delayed the recidivism

event compared to the control group of offenders who did not have supervision to follow. Second, because our cohort included a large number of cases it was possible to conduct additional analyses using precision and Propensity Score matching techniques. These statistical methods are intended to approximate randomization in quasi-experimental design studies, such as the one outlined here. These additional methods were used to strengthen confidence in the findings: if results were consistent across multiple methods then it can be concluded that results are likely representative of a true effect of the treatment (post-prison supervision) on the outcomes (recidivism and employment).

Limitations

There are several important limitations of the current study that must be weighed against the strength of the findings. Results from the current study are limited in their ability to be generalizable to other populations of released inmates, as is common in criminological and criminal justice research. This study examined a cohort of inmates released from Florida prisons from 2004 through 2011, excluding those inmates who were originally sentenced outside of Florida and those who were released to locations outside of Florida. Due in part to the unique characteristics of Florida's inmate and supervised populations, as well as the unique post-prison sentencing strategies employed, findings from this study are less likely to apply to correctional populations in other states or internationally. This limitation does not, however, minimize the importance of the findings presented here. Florida maintains one of the largest correctional populations in the U.S., and as such, continues to be a leader in finding responsible ways to help incarcerated populations successfully transition back into communities.

A second limitation of this study results from the measurement of return to prison. By including technical violations as one of the ways in which inmates are able to return to prison,

we were unable to draw clear distinctions between the effects of post-release supervision on the likelihood of returning to prison for new offending behavior versus returning to prison for a technical violation of supervision. It is not unsurprising that inmates who are released to post-prison supervision are at a greater risk for returning to prison for any reason because they have greater (and arguably easier) means of returning to prison via technical violations of supervision. Future research will need to parcel out this relationship by separately identifying returns to prison for technical violations of supervision from returns to prison for other (new criminal offending) reasons.

Policy Implications

Across the U.S., thousands of inmates are released from incarceration back into communities every day. How these individuals successfully transition back into their community from the correctional system has been studied by criminological research in a myriad of ways. While research focusing on the use of community corrections as a tool for offender reentry has largely focused on parole supervision, there remains a gap in the understanding of alternative post-prison release supervision strategies. Taken as a whole, this study finds generally positive effects of post-release supervision on reducing recidivism and increasing employment after release from prison, particularly for offenders placed on a term of split probation or split community control supervision. The findings from this study drive two broad policy recommendations for researchers, practitioners, and policy makers.

First, findings indicate support for the use of post-prison supervision, specifically split probation and split community control supervision, as viable tools to reduce reoffending and increase employment for inmates returning to communities. Findings indicate strong, positive support for this association which is consistent across multiple statistical methods, further

increasing the reliability of the results. The results showing an increased likelihood of offenders returning to prison is likely due to a conflation of returning to prison for technical violations with returning to prison for other reasons. We argue the increased likelihood of returning to prison for supervised offenders is not necessarily indicative of a failure of supervision. Instead, if offenders are instead being "pulled back" into the prison system via technical violations of supervision before they reoffend for more serious reasons (i.e., committing new felony offenses), then, in fact, supervision should be considered a success. By properly identifying and monitoring offenders who are at a greater risk for reoffending and enacting a swift and certain punishment (via return to prison) for less serious offenses, community corrections is able to reduce the likelihood that these offenders will return to serious criminal behaviors after release from incarceration.

Future emphasis should be placed on correctly identifying offenders that would be best suited for post-prison release supervision, and identifying the supervision strategies that are most effective for this particular population of offenders. Additionally, future research should attempt to parcel out the differential effects of post-prison supervision on arrest for any crime versus arrest for a felony offense. The seemingly conflicting findings may be, in part, due to arrest decisions made by law enforcement officers. For policy makers, the use of split supervision as a reentry tool seems to have great potential. However, we would caution policy makers from expanding the use of split supervision until further research has been conducted to better understand the full scope of positive and negative effects of this supervision strategy on the reentry outcomes of released inmates.

Second, findings show consistently positive effects of post-release supervision on employment. The ability to find and maintain stable employment after release from prison is a

critical component for successful reentry. It is likely that offenders released to post-prison supervision have a greater likelihood of obtaining employment within the first few months after release from incarceration *because* of their supervised status. In Florida, one of the standard conditions of supervision (which applies to everyone under active supervision, regardless of the type of supervision to which they are assigned) requires that an offender maintain employment while on supervision or else enroll in classes at an educational institution. Individuals who are released from prison with no supervision may return to communities with few or no employment opportunities or resources. Those on post-release supervision not only have the motivation to become and stay employed (i.e., avoid being technically violated), but they also have resources for finding employment through their supervising officer.

Inmates without supervision to follow incarceration are less likely to obtain employment within the first full quarter after their release. A clear recommendation for policy makers would be to emphasize employment assistance and job placement among these unsupervised inmates. With scarce resources it is important for policy makers and correctional administrators to devote available programming, officer time, and funding towards those with the greatest need. Based on the findings in this study it is clear that policy makers should focus reentry and transitional services towards inmates who will be released into communities directly from the prison system. Taken with the previous conclusion regarding the positive effects on post-release supervision and reduced likelihood of reoffending, our general conclusion is that post-release supervision is beneficial as a tool to assist inmates in their transition back into communities.

REFERENCES

Allison, P. D. (1999). *Logistic Regression Using the SAS® System: Theory and Application.* Cary, NC: SAS Institute, Inc.

Allison, P. D. (1995). *Survival Analysis Using SAS®: A Practical Guide*. Cary, NC: SAS Institute, Inc.

Anderson, D. C. (1995). *Crime and the politics of hysteria: How the Willie Horton story changed American justice.* New York: Random House.

Apel, R. J., & Sweeten, G. (2010). Propensity score matching in criminology and criminal justice. In A. R. Piquero, & D. Weisburd (Eds.), *Handbook of Quantitative Criminology* (pp. 543-562). New York: Springer.

Arkowitz, S., Shale, J., & Carabello, K. (2008). Conditional release programs for civilly committed sex offenders. *The Journal of Psychiatry & Law*, *36*(3), 485-511.

Bales, W. D., Blomberg, T. G., & Waters, K. (2013). Inmate tattoos and in-prison and post-prison violent behavior. *International Journal of Criminology and Sociology*, *2*: 20-31.

Bales, W. D., Gaes, G. G., Blomberg, T. G., & Pate, K. N. (2010). An assessment of the development and outcomes of determinate sentencing in Florida. *Justice Research and Policy*, *21*(4), 41-71.

Bales, W. D., & Mears, D. P. (2008). Inmate social ties and the transition to society: Does visitation reduce recidivism? *Journal of Research in Crime and Delinquency*, *45*(3), 287-321.

Baillargeon, J., Binswanger, P. J., Williams, B., & Murray, O. (2009). Psychiatric disorders and repeat incarcerations: The revolving prison door. *American Journal of Psychiatry, 166*(1), 103-109.

Beck, A. J. & Shipley, B. E. (1987). *Recidivism of young parolees*. Washington, DC: Bureau of Justice Statistics.

Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin*, *123*(2), 123-142.

Bottomly, K. A. (1990). Parole in transition: A comparative study of origins, developments, and prospects for the 1990s. In M. Tonry, & N. Morris (Eds.), *Crime and Justice: A Review of Research* (pp. 319-374). Chicago: University of Chicago Press.

Bureau of Justice Statistics. (2011). *National Corrections Reporting Program: Sentence length of state prisoners, by offense, admission type, sex, and race.* Retrieved from http://www.bjs.gov/index.cfm?ty=pbdetail&iid=2056

Bureau of Justice Statistics. (n.d.). *Build a multi-state fact sheet report.* Retrieved from http://www.ncrp.info/SitePages/BuildMultiStateFactSheetReport

Burton, S. E., Finn, M., Livingston, D., Scully, K., Bales, W. D., & Padgett, K. (2004). Applying a crime seriousness scale to measure changes in the severity of offenses by individuals arrested in Florida. *Justice Research and Policy*, *6*(1), 1-18.

Carson, E. A., & Golinelli, D. (2013). *Prisoners in 2012: Trends in admissions and releases, 1991–2012.* Washington, DC: Bureau of Justice Statistics.

Cheliotis, L. K. (2009). Before the next storm: Some evidence-based reminders about temporary release. *International Journal of Offender Therapy and Comparative Criminology*, *53*(4), 420-432.

Chen, M. K. & Shapiro, J. M. (2007). Do harsher prison conditions reduce recidivism? A dscontinuity-based approach. *American Law and Economics Review, 9*(1), 1-29.

Clear, T., & Cole, G. (1997). *American corrections.* Belmont, CA: Wadsworth Publishing.

Cooper, A. D., Durose, M. R., & Snyder, H. N. (2014). *Recidivism of prisoners released in 30 states in 2005: Patterns from 2005 to 2010.* Bureau of Justice Statistics. Retrieved from http://www.bjs.gov/index.cfm?ty=pbdetail&iid=4986.

Ditton, P., & Wilson, D. J. (1999). *Truth in sentencing in state prisons.* Washington, D.C.: Bureau of Justice Statistics.

Dooley, S., Seal, A., & Skarbek, D. (2014). The effect of prison gang membership on recidivism. *Journal of Criminal Justice, 42*(3), 267-275.

Durose, M. R., Cooper, A. D., & Snyder, H. N. (2014). *Recidivism of prisoners released in 30 states in 2005: patterns from 2005 to 2010.* Washington, DC: Bureau of Justice Statistics.

Florida Department of Corrections. (2013a). *2012 Florida prison recidivism study - Releases from 2004 to 2011.* Tallahassee, FL: Bureau of Research and Data Analysis.

Florida Department of Corrections. (2013b). *Annual report: Fiscal Year 2012-2013.* Tallahassee, FL: Bureau of Research and Data Analysis.

Florida Department of Corrections. (2014a). *2013 Florida prison recidivism study - Releases from 2005 to 2012.* Tallahassee, FL: Bureau of Research and Data Analysis.

Florida Department of Corrections. (2014b). 2013-2014 Agency statistics. *Inmate Releases and Time Served*. Retrieved from http://www.dc.state.fl.us/pub/annual/1314/stats/im_release.html

Florida Department of Corrections. (n.d.). *Frequently asked questions regarding parole*. Retrieved from http://www.dc.state.fl.us/oth/inmates/parole.html

Gelb, A., Dhungana, K., Adams, B., McCann, E., & Zafft, K. (2014). *Max out: The rise in prison inmates released without supervision.* Washington, DC: The Pew Charitable Trusts.

Grann, D. M., & S. Fazel. (2008). The association between psychiatric diagnosis and violent re-offending in adult offenders in the community. *BMC Psychiatry, 8*(1), 92-98.

Grattet, R., Petersilia, J., & Lin, J. (2008). *Parole violations and revocations in California.* Washington, DC: National Institute of Justice.

Herbermann, E. J., & Bonczar, T. P. (2014). *Probation and parole in the United States, 2013.* Washington, DC: Bureau of Justice Statistics.

Hipp, J. R., Petersilia, J., & Turner, S. (2010). Parolee recidivism in California: The effect of neighborhood context and social service agency characteristics. *Criminology*, *48*(4), 947-979.

Hipp, J. R., & Yates, D. K. (2009). Do returning parolees affect neighborhood crime? A case study of Sacramento. *Criminology*, *47*(3), 619–656.

Huebner, B. M., Varano, S. P., & Bynum, T.S. (2007). Gangs, guns and drugs: Recidivism among serious young offenders. *Criminology and Public Policy, 6*(2):187-221.

Jackson, P. C. (1983). Some effects of parole supervision on recidivism. *British Journal of Criminology*, *23*(1), 17-34.

Kohl, R., Hoover, H. M., McDonald, S. M., & Solomon, A. L. (2008). *Massachusetts recidivism study: A closer look at releases and returns to prison.* Washington DC: Urban Institute-Justice Policy Center.

Langan, P. A., & Levin, D. J. (2002). *Recidivism of prisoners released in 1994*. Washington, DC: Bureau of Justice Statistics.

Langan, P. A., Schmitt, E. L., & Durose, M. R. (2003). *Recidivism of sex offenders released from prison in 1994.* Washington, DC: Bureau of Justice Statistics.

Lin, J., Grattet, R., & Petersilia, J. (2010). "Back-end sentencing" and reimprisonment: Individual, organizational, and community predictors of parole sanctioning decisions. *Criminology*, *48*(3), 759–795.

Mears, D. P. & Bales, W. D. (2009). Supermax incarceration and recidivism. *Criminology, 47*(4),1131-1166.

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

Nagin, D. S., Cullen, F. T., & Jonson, C. L. (2009). Imprisonment and reoffending. *Crime and Justice*, *38*(1), 115-200.

National Research Council. (2008). *Parole, desistance from crime, and community integration.* Washington, DC: The National Academies Press.

Ostermann, M. (n.d.). *The impact of post-release supervision upon recidivism in New Jersey*. Unpublished report, Rutgers University School of Criminal Justice.

Petersilia, J. (1999). Parole and prisoner reentry in the United States. *Crime and Justice*, *26*: 479-529.

Petersilia, J. (2000a). Parole and prisoner reentry in the United States. *Perspectives*, *24*(3), 32-46.

Petersilia, J. (2000b). Parole and prisoner reentry in the United States, Part II. *Perspectives*, *24*(4), 40-47.

Piehl, A. M., & LoBuglio, S. F. (2005). Does supervision matter? In J. Travis, & C. Visher (Eds.), *Prisoner Reentry and Crime in America* (pp. 105-138). Cambridge: Cambridge University Press.

Putnins, A. (2005). Assessing recidivism risk among young offenders. *The Australian and New Zealand Journal of Criminology, 38*(3), 324-339.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41-55.

Selltiz, C., Jahoda, M., Deutsch, M., & Cook, S. W. (1959). *Research methods in social relations.* New York: Holt.

Solomon, A. L., Kachnowski, V., & Bhati, A. (2005). *Does parole work? Analyzing the impact of postprison supervision on rearrest outcomes.* Washington, DC: Urban Institute.

SPEC Associates. (2002). *Final evaluation report: Michigan department of correction's GPS pilot phase II.* Detroit, Michigan: Michigan Department of Corrections.

Spivak, A. L., & Damphousse, K. R. (2006). Who returns to prison? A survival analysis of recidivism among adult offenders released in Oklahoma, 1985-2004. *Justice Research and Policy*, *8*(2), 57-88.

Steiner, B. (2004). Treatment retention: A theory of post-release supervision for the substance abusing offender. *Federal Probation*, *68*(3), 24-29.

Stemen, D. (2007). *Reconsidering incarceration: New directions for reducing crime.* Vera Institute of Justice, Center on Sentencing and Corrections. Retrieved from http://vera.org/sites/default/files/resources/downloads/veraincarc_vFW2.pdf

Stemen, D., & Rengifo, A. F. (2012). Charting the evolution of structure and determinacy in state sentencing and corrections policies 1970–2010. *Justice Research and Policy*, *14*(2), 1-31.

Stemen, D., Rengifo, A., & Wilson, J. (2005). *Of fragmentation and ferment: The impact of state sentencing policies on incarceration rates, 1975-2002.* Final report to the National Institute of Justice.

Talarico, S. M., & Myers, M. A. (1987). Split sentencing in Georgia: A test of two empirical assumptions. *Justice Quarterly*, *4*(4), 611-630.

The National Conference of State Legislatures. (2011). *Principles of effective state sentencing and corrections policy*. Retrieved from http://www.ncsl.org/research/civil-and-criminal-justice/principles-of-sentencing-and-corrections-policy.aspx

The PEW Charitable Trusts. (2013). *Issue brief: The impact of parole in New Jersey.* Retrieved from The PEW Charitable Trusts Research and Analysis: http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2013/PSPPNJParoleBriefpdf.pdf

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

U.S. Bureau of the Census. (2012). *The recession of 2007-2009*. Retrieved from http://www.bls.gov/spotlight/2012/recession/pdf/recession_bls_spotlight.pdf

Visher, C. A., Lattimore, P. K., & Linster, R. L. (1991). Predicting the recidivism of serious youthful offenders using survival models. *Criminology, 29*(3), 329-366.

Table 1. Control Variables Included in the Analyses

Variable Name	Values
Sex	1 = Male, 0 = Female
Race/Ethnicity:	
White	1 = White/Non−Hispanic, 0 = Non-White
Black	1 = Black/non−Hispanic, 0 = White
Hispanic	1 = Hispanic, 0 = Black/non-Hispanic/White Non-Hispanic
Age at Prison Release	Continuous in Years
Education Tested Grade Level (TABE)	Continuous in Years
Substance Abuse Dependence	DSSI−Physical/Psychological Dependence = 1, None = 0
Psychiatric Diagnosis at Prison Release	0 = No, 1 = Yes
Employment Prior to Prison Admission	0 = Not employed first quarter prior to prison, 1 = employed
Number of Tattoos	Continuous number
Suspected or Confirmed Gang Member	0 = No, 1 = Yes
Primary Offense at Prison Admission	Charge With Longest Sentence
Murder/Manslaughter	0 = No, 1 = Yes
Sex Offenses	0 = No, 1 = Yes
Robbery	0 = No, 1 = Yes
Other Violent Offenses	0 = No, 1 = Yes
Burglary	0 = No, 1 = Yes
Property Offenses	0 = No, 1 = Yes
Drug Offenses	0 = No, 1 = Yes
Weapons Offenses	0 = No, 1 = Yes
Other Offenses	0 = No, 1 = Yes
Number of Prior Burglary Offenses	Continuous number
Number of Prior Theft Offense	Continuous number
Number of Prior Arrests	Continuous number
Number of Prior Florida Prison Commitments	0 = None, 1 = One, 2 = Two, 3 = Three or More
Time Served in Prison	Months From Prison Admission to Release
Custody at Release	Custody Level In Prison at Time of Release
Community	0 = No, 1 = Yes
Medium/Minimum	0 = No, 1 = Yes
Close	0 = No, 1 = Yes
One or More Disciplinary Infractions Within 365 Days of Release	0 = No, 1 = Yes
Total Number of Disciplinary Infractions Per Month	Continuous number
Number of Visits Per Month	Continuous number
Year of Release from Prison	
2004	0 = No, 1 = Yes
2005	0 = No, 1 = Yes
2006	0 = No, 1 = Yes
2007	0 = No, 1 = Yes
2008	0 = No, 1 = Yes
2009	0 = No, 1 = Yes
2010	0 = No, 1 = Yes
2011	0 = No, 1 = Yes

Table 2. Recidivism Measures: Arrests

Variable Name	Values
Recidivism	
Survival Variable − Arrest for any crime excluding violations - if censored	0 = Not arrested for any crime, excluding violations, prior to the last follow-up date; 1 = Number of months to first arrest for any crime excluding violations prior to the last follow-up date
Survival Variable − Number of months to first arrest for any crime excluding violations for uncensored cases or number of months to the last follow-up date for censored cases	Number of months to last follow-up date for cases not arrested for any crime excluding violations (censored) or number of months to first arrest for any crime excluding violations (uncensored)
If arrested for any crime excluding violations within one year post-prison release	0 = Not arrested for any crime, excluding violations, within one year post-prison release; 1 = Arrested for any crime, excluding violations, within one year post-prison release; Missing = less than one year from prison release to last follow-up date
If arrested for any crime excluding violations within two years post-prison release	0 = Not arrested for any crime, excluding violations, within two years post-prison release; 1 = Arrested for any crime, excluding violations, within two years post-prison release; Missing = less than two years from prison release to last follow-up date
If arrested for any crime excluding violations within three years post-prison release	0 = Not arrested for any crime, excluding violations, within three years post-prison release; 1 = Arrested for any crime, excluding violations, within three years post-prison release; Missing = less than three years from prison release to last follow-up date
Survival Variable − Arrest for a felony crime - if censored	0 = Not arrested for a felony crime prior to the last follow-up date; 1 = Number of months to first arrest for a felony crime prior to the last follow-up date
Survival Variable − Number of months to first arrest for a felony crime for uncensored cases or number of months to the last follow-up date for censored cases	Number of months to last follow-up date for cases not arrested for a felony crime (censored) or number of months to first arrest for a felony crime (uncensored)
If arrested for a felony crime within one year post-prison release	0 = Not arrested for a felony crime within one year post-prison release; 1 = Arrested for a felony crime within one year post-prison release; Missing = less than one year from prison release to last follow-up date
If arrested for a felony crime within two years post-prison release	0 = Not arrested for a felony crime within two years post-prison release; 1 = Arrested for a felony crime within two years post-prison release; Missing = less than two years from prison release to last follow-up date
If arrested for a felony crime within three years post-prison release	0 = Not arrested for a felony crime within three years post-prison release; 1 = Arrested for a felony crime within three years post-prison release; Missing = less than three years from prison release to last follow-up date

Table 2a. Recidivism Measures: Conviction and Return to Prison, and Employment

Variable Name	Values
Recidivism	
Survival Variable − Conviction for a felony crime - if censored	0 = Not convicted for a felony crime prior to the last follow-up date; 1 = Number of months to first conviction for a felony crime prior to the last follow-up date
Survival Variable − Number of months to first conviction for a felony crime for uncensored cases or number of months to the last follow-up date for censored cases	Number of months to last follow-up date for cases not convicted for a felony crime (censored) or number of months to first convicted for a felony crime (uncensored)
If convicted for a felony crime within one year post-prison release	0 = Not convicted for a felony crime within one year post-prison release; 1 = Convicted for a felony crime within one year post-prison release; Missing = less than one year from prison release to last follow-up date
If convicted for a felony crime within two years post-prison release	0 = Not convicted for a felony crime within two years post-prison release; 1 = Convicted for a felony crime within two years post-prison release; Missing = less than two years from prison release to last follow-up date
If convicted for a felony crime within three years post-prison release	0 = Not convicted for a felony crime within three years post-prison release; 1 = Convicted for a felony crime within three years post-prison release; Missing = less than three years from prison release to last follow-up date
Survival Variable − Return to Prison for Any Reason - if censored	0 = Not arrested for a felony crime prior to the last follow-up date; 1 = Number of months to first arrest for a felony crime prior to the last follow-up date
Survival Variable − Number of months to first return to prison for any reason for uncensored cases or number of months to the last follow-up date for censored cases	Number of months to last follow-up date for cases that did not return to prison for any reason (censored) or number of months to first return to prison for any reason (uncensored)
If returned to prison for any reason within one year post-prison release	0 = Returned to prison for any reason within one year post-prison release; 1 = Not returned to prison for any reason within one year post-prison release; Missing = less than one year from prison release to last follow-up date
If returned to prison for any reason within two years post-prison release	0 = Returned to prison for any reason within two years post-prison release; 1 = Not returned to prison for any reason within two years post-prison release; Missing = less than two years from prison release to last follow-up date
If returned to prison for any reason within three years post-prison release	0 = Returned to prison for any reason within three years post-prison release; 1 = Not returned to prison for any reason within three years post-prison release; Missing = less than three years from prison release to last follow-up date
Employment	
Post-Prison Employment	0 = No employment during first full quarter after prison release; 1 = Employed during first full quarter after prison release

Table 3. Descriptive Statistics – Recidivism and Post-Prison Employment Outcome Variables for Inmates with Post-Prison Supervision and Inmates Released with No Supervision to Follow

	Any Post-Prison Supervision n=64,223		Split Probation/ Community Control n=51,929		Conditional Release n=7,454		No Supervision n=137,224
	Mean	Mean Difference	Mean	Mean Difference	Mean	Mean Difference	Mean
Dependent Variables (1= Yes, 0= No)							
Arrest for any felony or misdemeanor (excluding technical violations)							
Anytime	0.621	0.080***	0.613	0.088***	0.678	0.022***	0.725
One year	0.325	0.078***	0.310	0.094***	0.437	−0.034***	0.437
Two years	0.493	0.093***	0.475	0.111***	0.632	−0.046***	0.608
Three years	0.611	0.088***	0.594	0.105***	0.755	−0.056***	0.693
Arrest for any felony (excluding technical violations)							
Anytime	0.596	0.019***	0.594	0.020***	0.627	−0.012*	0.607
One year	0.317	−0.004†	0.312	0.002	0.379	−0.066***	0.316
Two years	0.461	0.012***	0.454	0.019***	0.545	−0.073***	0.473
Three years	0.546	0.017***	0.541	0.022***	0.622	−0.059***	0.561
Conviction							
Anytime	0.267	0.162***	0.265	0.163***	0.285	0.144***	0.437
One year	0.126	0.066***	0.122	0.070***	0.156	0.036***	0.195
Two years	0.193	0.113***	0.189	0.117***	0.237	0.069***	0.312
Three years	0.240	0.145***	0.237	0.148***	0.288	0.097***	0.392
Return to Prison							
Anytime	0.490	−0.139***	0.484	−0.132***	0.529	−0.108***	0.336
One year	0.129	−0.098***	0.121	−0.090***	0.182	−0.151***	0.065
Two years	0.237	−0.130***	0.227	−0.120***	0.303	−0.196***	0.177
Three years	0.310	−0.133***	0.302	−0.124***	0.381	−0.204***	0.273
Post-prison Employment							
Within first quarter	0.353	−0.021***	0.365	−0.033***	0.272	0.060***	0.332

†p<.10, *p<.05, ***p<.001

Mean differences are calculated for each post-prison supervision release group compared to those who had no supervision to follow release from prison.

Table 4. Descriptive Statistics – Control Variables for Analyses of Inmates with Post-Prison Supervision and Inmates Released with No Supervision to Follow

	Any Post-Prison Supervision n=64,223		Split Probation/ Community Control n=52,028		Conditional Release n=7,454		No Supervision n=137,224
	Mean	Mean Diff.	Mean	Mean Diff.	Mean	Mean Diff.	Mean
Sex (1=Male, 0=Female)	0.891	−0.025***	0.880	−0.014***	0.956	−0.089***	0.866
Race/Ethnicity							
White (1=White/non-Hispanic, 0=Non−White)	0.474	−0.046***	0.491	−0.063***	0.368	0.060***	0.428
Black (1=Black/non-Hispanic, 0=White)	0.453	0.057***	0.433	0.077***	0.566	−0.057***	0.510
Hispanic (1=Hispanic, 0=Black/non-Hispanic or White/non-Hispanic)	0.073	−0.011***	0.076	−0.014***	0.065	−0.003	0.062
Age at prison release (in years)	35.437	−1.228***	34.477	−0.267***	38.391	−4.181***	34.210
Education Tested Grade Level	7.541	−0.380***	7.708	−0.547***	6.698	0.463***	7.161
Substance Abuse Dependence (1= Physical or psychological dependence, 0= None)	0.517	−0.013***	0.511	−0.007**	0.503	0.001	0.504
Psychiatric Diagnosis at prison release (1=Yes, 0=No)	0.113	−0.005**	0.110	−0.001	0.137	−0.028***	0.109
Employment prior to prison admission	0.252	0.062***	0.250	0.063***	0.285	0.028***	0.314
Number of tattoos	2.740	0.286***	2.283	0.743***	6.123	−3.098***	3.025
Suspected or Confirmed Gang Member	0.062	−0.012***	0.063	−0.013***	0.069	−0.019***	0.050
Primary Offense							
Murder/Manslaughter	0.027	−0.018***	0.027	−0.018***	0.019	−0.010***	0.009
Sex offenses	0.078	−0.058***	0.082	−0.061***	0.082	−0.061***	0.020
Robbery	0.103	−0.058***	0.099	−0.055***	0.121	−0.077***	0.045
Other violent offenses	0.184	−0.077***	0.168	−0.061***	0.336	−0.229***	0.107
Burglary	0.159	−0.028***	0.164	−0.033***	0.121	0.011**	0.131
Property offenses	0.125	0.048***	0.133	0.039***	0.078	0.095***	0.172
Drugs	0.203	0.160***	0.211	0.152***	0.146	0.217***	0.363
Weapons offenses	0.024	0.015***	0.023	0.016***	0.034	0.005*	0.039
Other	0.097	0.016***	0.093	0.021***	0.065	0.049***	0.114
Number of prior burglary offenses	0.559	−0.183***	0.578	−0.202***	0.412	−0.036**	0.376
Number of prior theft offenses	1.054	−0.129***	1.119	−0.195***	0.685	0.240***	0.925
Number of prior arrests	12.525	1.565***	11.703	2.387***	16.797	−2.707***	14.090
Number of prior prison commitments[1]	0.581	0.012**	0.442	0.151***	1.419	−0.825***	0.593
Time served in prison (in months)	35.805	−14.973***	34.257	−13.424***	30.089	−9.257***	20.832
Custody Level at Release							
Community	0.197	0.039***	0.217	0.019***	0.070	0.166***	0.236
Medium/Minimum	0.652	−0.001	0.643	0.008**	0.714	−0.063***	0.651
Close	0.151	−0.038***	0.140	−0.027***	0.216	−0.103***	0.114
One or more DRs within 365 days of release (1=Yes, 0=No)	0.355	0.032***	0.363	0.024***	0.347	0.040***	0.387
Total number of DRs per month	0.086	0.014***	0.091	0.009***	0.071	0.029***	0.100
Number of visits per month	0.313	−0.022***	0.327	−0.036***	0.275	0.016	0.291
Year of Release from Prison							
2004	0.118	−0.014***	0.126	−0.022***	0.041	0.064***	0.105
2005	0.115	−0.002	0.123	−0.010***	0.049	0.064***	0.113
2006	0.120	0.003†	0.127	−0.004*	0.069	0.054***	0.123
2007	0.124	0.008***	0.128	0.004*	0.095	0.037***	0.132
2008	0.129	0.006***	0.128	0.007***	0.137	−0.001	0.135
2009	0.133	0.002	0.130	0.005**	0.164	−0.029***	0.135
2010	0.131	0.001	0.122	0.009***	0.206	−0.075***	0.131
2011	0.130	−0.004*	0.116	0.010***	0.239	−0.113***	0.126

†p<.10, *p<.05, **p<.01, ***p<.001

[1] Truncated where 3= 4 or more prior commitments.

Mean differences are calculated for each post-prison supervision release group compared to those who had no supervision to follow release from prison.

Table 5. Effect of Post-Prison Supervision on Recidivism: Cox Proportional Hazard Regression Models

	β	Standard Error	Hazard Ratio	N
Any Type of Post-Prison Supervision				
Arrest for any crime – Anytime	−0.118***	0.006	0.889	136,006
Arrest for a felony – Anytime	0.076***	0.007	1.078	122,664
Conviction – Anytime	−0.500***	0.009	0.606	75,953
Return to prison – Anytime	0.517***	0.008	1.678	79,680
Split Probation/Community Control				
Arrest for any crime – Anytime	−0.142***	0.007	0.868	127,976
Arrest for a felony – Anytime	0.076***	0.007	1.079	115,277
Conviction – Anytime	−0.514***	0.010	0.598	72,627
Return to prison – Anytime	0.527***	0.008	1.694	73,363
Conditional Release Supervision				
Arrest for any crime – Anytime	0.037*	0.015	1.038	101,194
Arrest for a felony – Anytime	0.125***	0.016	1.132	89,036
Conviction – Anytime	−0.465***	0.023	0.628	60,963
Return to prison – Anytime	0.600***	0.018	1.821	52,157

*p<.05, ***p<.001

Total Observations = Any post-prison supervision: 201,447; Split Probation/CC: 189,252; Conditional Release: 144,678

Table 6. Effect of Length of Time on Post-Prison Supervision on Recidivism: Cox Proportional Hazard Regression Models

	β	Standard Error	Hazard Ratio	N
Split Probation/Community Control				
Arrest for any crime – Anytime	−0.039***	0.004	0.962	31,380
Arrest for a felony – Anytime	−0.022***	0.004	0.978	30,478
Conviction – Anytime	−0.027***	0.006	0.973	13,604
Return to prison – Anytime	0.009*	0.004	1.009	24,789
Conditional Release Supervision				
Arrest for any crime – Anytime	−0.029***	0.004	0.971	5,048
Arrest for a felony – Anytime	−0.007	0.004	0.993	4,663
Conviction – Anytime	−0.023***	0.007	0.978	2,121
Return to prison – Anytime	0.025***	0.005	1.026	3,939

*p<.05, ***p<.001

Total Observations = Split Probation/CC: 51,388; Conditional Release: 7,444

Table 7. Effect of Any Post-Prison Supervision on Recidivism and Employment: Logistic Regression Models (Control Covariates Not Presented)

Recidivism Measure	β	O.R.	χ^2	R^2	N
Arrest for any crime (excluding technical violations)					
One Year	−0.184***	0.832	32,243.696***	0.201	201,447
Two Years	−0.207***	0.813	37,159.584***	0.238	190,160
Three Years	−0.204***	0.816	35,669.1105***	0.183	176,893
Arrest for a felony (excluding technical violations)					
One Year	0.181***	1.199	24,274.216***	0.159	201,447
Two Years	0.128***	1.136	28,096.403***	0.189	184,548
Three Years	0.115***	1.122	25,239.351***	0.197	158,254
Conviction					
One Year	−0.399***	0.671	16,335.188***	0.130	201,420
Two Years	−0.515***	0.598	21,422.102***	0.156	188,850
Three Years	−0.586***	0.557	21,490.562***	0.171	162,729
Return to Prison					
One Year	1.526***	4.601	9,264.523***	0.121	201,447
Two Years	0.984***	2.675	13,310.541***	0.113	201,447
Three Years	0.787***	2.197	13,669.084***	0.115	175,965
Post-Prison Employment					
Employed within the first quarter	0.120***	1.127	56,630.296***	0.339	201,447

***p<.001

O.R. = Odds Ratio

Table 8. Effect of Post-Prison Release Split Probation/Community Control Supervision on Recidivism and Employment: Logistic Regression Models (Control Covariates Not Presented)

Recidivism Measure	β	O.R.	χ^2	R^2	N
Arrest for any crime (excluding technical violations)					
One Year	−0.229***	0.796	30,625.768***	0.203	189,252
Two Years	−0.253***	0.777	35,070.118***	0.238	178,950
Three Years	−0.225***	0.798	28,695.409***	0.239	149,725
Arrest for a felony (excluding technical violations)					
One Year	0.186***	1.204	23,135.682***	0.162	189,252
Two Years	0.124***	1.132	28,514.574***	0.197	178,084
Three Years	0.112***	1.118	24,017.379***	0.199	149,725
Conviction					
One Year	−0.408***	0.665	15,647.124***	0.132	189,229
Two Years	−0.526***	0.591	20,540.472***	0.158	177,860
Three Years	−0.590***	0.554	20,540.849***	0.173	153,874
Return to Prison					
One Year	1.537***	4.652	7,671.434***	0.114	189,252
Two Years	1.008***	2.739	11,713.668***	0.108	189,252
Three Years	0.810***	2.249	12,549.687***	0.113	166,053
Post-Prison Employment					
Employed within the first quarter	0.104***	1.110	54,421.711***	0.346	189,252

***p<.001

O.R. = Odds Ratio

Table 9. Effect of Post-Prison Release Conditional Release Supervision on Recidivism and Employment: Logistic Regression Models (Control Covariates Not Presented)

Recidivism Measure	β	O.R.	χ^2	R^2	N
Arrest for any crime (excluding technical violations)					
One Year	0.102***	1.107	22,602.956***	0.195	144,678
Two Years	0.115***	1.122	25,187.277***	0.227	136,588
Three Years	0.110**	1.116	27,517.213***	0.276	127,435
Arrest for a felony (excluding technical violations)					
One Year	0.243***	1.275	17,847.932***	0.163	144,678
Two Years	0.255***	1.290	20,430.003***	0.191	132,040
Three Years	0.237***	1.267	18,092.868***	0.199	112,576
Conviction					
One Year	−0.361***	0.697	11,699.335***	0.125	144,654
Two Years	−0.475***	0.622	14,857.670***	0.147	135,253
Three Years	−0.563***	0.570	14,574.267***	0.161	115,879
Return to Prison					
One Year	1.618***	5.043	3,886.516***	0.095	144,678
Two Years	1.010***	2.745	7,057.013***	0.093	144,678
Three Years	0.821***	2.273	8,077.489***	0.101	125,716
Post-Prison Employment					
Employed within the first quarter	0.165***	1.180	41,146.227***	0.345	144,678

**p<.01, ***p<.001

O.R. = Odds Ratio

Table 10. Effect of Length of Time (in years) on Post-Prison Release Split Probation/Community Control Supervision on Recidivism and Employment: Logistic Regression Models (Control Covariates Not Presented)

Recidivism Measure	β	O.R.	χ^2	R^2	N
Arrest for any crime (excluding technical violations)					
One Year	−0.049***	0.952	7,698.440***	0.196	51,388
Two Years	−0.050***	0.951	9,490.949***	0.237	48,453
Three Years	−0.056***	0.945	8,650.568***	0.254	41,212
Arrest for a felony (excluding technical violations)					
One Year	−0.035***	0.966	6,132.959***	0.158	51,388
Two Years	−0.034***	0.967	7,508.309***	0.191	48,555
Three Years	−0.033***	0.967	6,655.209***	0.199	41,212
Conviction					
One Year	−0.015	0.985	3,071.881***	0.111	51,385
Two Years	−0.016†	0.985	3,720.341***	0.119	48,496
Three Years	−0.029***	0.972	3,548.632***	0.121	42,301
Return to Prison					
One Year	−0.021*	0.979	1,278.009***	0.047	51,388
Two Years	−0.005	0.995	2,635.949***	0.076	51,388
Three Years	0.008	1.008	3,046.739***	0.092	45,422
Post-Prison Employment					
Employed within the first quarter	0.019*	1.019	14,894.264***	0.344	51,388

†p<.10, *p<.05, ***p<.001

O.R. = Odds Ratio

Table 11. Effect of Length of Time (in months) on Post-Prison Release Conditional Release Supervision on Recidivism and Employment: Logistic Regression Models (Control Covariates Not Presented)

Recidivism Measure	β	O.R.	χ^2	R^2	N
Arrest for any crime (excluding technical violations)					
One Year	−0.052***	0.950	1,163.337***	0.194	7,444
Two Years	−0.051***	0.951	1,376.931***	0.254	6,705
Three Years	−0.038***	0.962	1,672.900***	0.360	6,039
Arrest for a felony (excluding technical violations)					
One Year	−0.008	0.992	726.710***	0.127	7,444
Two Years	−0.011	0.989	801.849***	0.162	6,199
Three Years	−0.000	1.000	723.912***	0.198	4,612
Conviction					
One Year	−0.019†	0.981	457.897***	0.103	7,440
Two Years	−0.022*	0.978	516.492***	0.115	6,501
Three Years	−0.020*	0.980	481.321***	0.135	4,865
Return to Prison					
One Year	0.015†	1.015	166.968***	0.036	7,444
Two Years	0.041***	1.042	308.627***	0.058	7,444
Three Years	0.042***	1.043	262.245***	0.061	5,674
Post-Prison Employment					
Employed within the first quarter	0.034***	1.035	1,371.609***	0.244	7,444

†p<.10, *p<.05, ***p<.001

O.R. = Odds Ratio

Table 12. Effect of Any Post-Prison Supervision on Recidivism and Employment: Precision Matching Models (Matched Covariates Not Presented)

	β	Odds Ratio	N
Recidivism Measure			
Arrest for any crime (excluding technical violations)			
One Year	−0.188***	0.829	26,739
Two Years	−0.199***	0.819	25,314
Three Years	−0.217***	0.804	23,650
Arrest for a felony (excluding technical violations)			
One Year	0.134***	1.144	26,739
Two Years	0.073**	1.076	24,605
Three Years	0.031	1.032	21,238
Conviction			
One Year	−0.366***	0.693	26,732
Two Years	−0.490***	0.613	25,167
Three Years	−0.587***	0.556	21,814
Return to Prison			
One Year	1.457***	4.295	26,739
Two Years	0.908***	2.480	26,739
Three Years	0.706***	2.026	23,494
Post-Prison Employment			
Employed within the first quarter	0.173***	1.189	26,739

**p<.01, ***p<.001

Table 13. Effect of Post-Prison Split Probation/Community Control Supervision on Recidivism and Employment: Precision Matching Models (Matched Covariates Not Presented)

	β	Odds Ratio	N
Recidivism Measure			
Arrest for any crime (excluding technical violations)			
One Year	−0.221***	0.802	23,234
Two Years	−0.230***	0.795	22,047
Three Years	−0.224***	0.800	18,619
Arrest for a felony (excluding technical violations)			
One Year	0.140***	1.150	23,234
Two Years	0.080**	1.084	21,968
Three Years	0.053†	1.055	18,619
Conviction			
One Year	−0.362***	0.697	23,231
Two Years	−0.476***	0.621	21,974
Three Years	−0.551***	0.576	19,114
Return to Prison			
One Year	1.494***	4.453	23,234
Two Years	0.944***	2.570	23,234
Three Years	0.737***	2.091	20,549
Post-Prison Employment			
Employed within the first quarter	0.189***	1.207	23,234

†p<.10, **p<.01, ***p<.001

Table 14. Effect of Post-Prison Conditional Release Supervision on Recidivism and Employment: Precision Matching Models (Matched Covariates Not Presented)

	β	Odds Ratio	N
Recidivism Measure			
Arrest for any crime (excluding technical violations)			
One Year	0.061	1.063	3,426
Two Years	0.136	1.146	3,197
Three Years	0.063	1.065	2,998
Arrest for a felony (excluding technical violations)			
One Year	0.127	1.135	3,426
Two Years	0.197*	1.219	3,027
Three Years	0.108	1.114	2,486
Conviction			
One Year	−0.403***	0.668	3,420
Two Years	−0.534***	0.586	3,123
Three Years	−0.688***	0.503	2,579
Return to Prison			
One Year	1.364***	3.911	3,426
Two Years	0.740***	2.096	3,426
Three Years	0.626***	1.870	2,855
Post-Prison Employment			
Employed within the first quarter	−0.086	0.917	3,426

*p<.05, ***p<.001

Table 15. Effect of Any Post-Prison Supervision on Recidivism and Employment: Propensity Score Matching Models (Matched Covariates Not Presented)

	Unmatched Sample				Matched Sample				
	Supervised	No Supervision	*t*-value	n	Supervised	No Supervision	Difference	*t*-value	n
Recidivism Measure									
Arrest for any crime (excluding technical violations)									
One Year	0.325	0.404	−33.90	201,447	0.338	0.368	−0.029***	−10.33	195,068
Two Years	0.493	0.586	−38.11	190,160	0.510	0.545	−0.035***	−11.62	184,275
Three Years	0.611	0.699	−36.72	176,893	0.629	0.665	−0.036***	−11.97	171,319
Arrest for a felony (excluding technical violations)									
One Year	0.317	0.314	1.66	201,447	0.328	0.286	0.041***	15.31	195,068
Two Years	0.461	0.473	−4.60	184,548	0.473	0.440	0.033***	10.94	178,672
Three Years	0.546	0.563	−6.32	158,254	0.558	0.527	0.031***	9.22	152,834
Conviction									
One Year	0.126	0.192	−36.95	201,420	0.131	0.174	−0.043***	−20.51	195,043
Two Years	0.193	0.306	−51.86	188,850	0.202	0.283	−0.080***	−30.97	182,867
Three Years	0.240	0.385	−58.14	162,729	0.251	0.357	−0.106***	−35.43	157,285
Return to Prison									
One Year	0.129	0.031	86.02	201,447	0.128	0.031	0.096***	61.82	195,068
Two Years	0.237	0.107	77.37	201,447	0.236	0.103	0.132***	61.18	195,068
Three Years	0.310	0.177	63.30	175,965	0.308	0.170	0.137***	51.88	170,277
Post-Prison Employment									
Employed within the first quarter	0.353	0.332	9.15	201,447	0.353	0.333	0.020***	7.09	201,447

***p<.001

Table 16. Effect of Post-Prison Split Probation/Community Control Supervision on Recidivism and Employment: Propensity Score Matching Models (Matched Covariates Not Presented)

	Unmatched Sample				Matched Sample				
	Supervised	No Supervision	*t*-value	n	Supervised	No Supervision	Difference	*t*-value	n
Recidivism Measure									
Arrest for any crime (excluding technical violations)									
One Year	0.309	0.404	−37.83	189,252	0.318	0.351	−0.033***	−10.89	186,092
Two Years	0.474	0.586	−42.62	178,950	0.486	0.532	−0.046***	−14.04	175,997
Three Years	0.560	0.314	−36.85	149,725	0.571	0.614	−0.042***	−11.98	146,813
Arrest for a felony (excluding technical violations)									
One Year	0.312	0.314	−0.92	189,252	0.318	0.275	0.043***	14.81	186,092
Two Years	0.465	0.485	−7.63	178,084	0.474	0.439	0.035***	10.59	175,060
Three Years	0.540	0.563	−7.91	149,725	0.549	0.519	0.029***	8.21	146,813
Conviction									
One Year	0.122	0.192	−36.06	189,229	0.125	0.170	−0.044***	−19.52	186,067
Two Years	0.188	0.306	−50.12	177,860	0.194	0.273	−0.079***	−28.41	174,827
Three Years	0.236	0.385	−55.49	153,874	0.244	0.347	−0.103***	−32.19	150,958
Return to Prison									
One Year	0.121	0.031	77.27	189,252	0.122	0.028	0.092***	56.52	186,092
Two Years	0.227	0.107	68.09	189,252	0.228	0.096	0.132***	56.75	186,092
Three Years	0.301	0.177	55.94	166,053	0.301	0.162	0.139***	48.84	163,067
Post-Prison Employment									
Employed within the first quarter	0.365	0.332	13.55	189,252	0.365	0.339	0.026***	8.50	186,092

***p<.001

Table 17. Effect of Post-Prison Conditional Release Supervision on Recidivism and Employment: Propensity Score Matching Models (Matched Covariates Not Presented)

	Unmatched Sample				Matched Sample				
	Supervised	No Supervision	*t*-value	n	Supervised	No Supervision	Difference	*t*-value	n
Recidivism Measure									
Arrest for any crime (excluding technical violations)									
One Year	0.437	0.404	5.82	144,678	0.435	0.437	−0.003	−0.30	144,304
Two Years	0.632	0.586	7.43	136,588	0.628	0.616	0.012	1.42	136,283
Three Years	0.755	0.699	9.33	127,435	0.751	0.732	0.020***	2.40	127,155
Arrest for a felony (excluding technical violations)									
One Year	0.379	0.314	11.84	144,678	0.375	0.353	0.021***	2.71	144,304
Two Years	0.545	0.473	11.19	132,040	0.540	0.507	0.033***	3.60	131,773
Three Years	0.622	0.563	7.87	112,576	0.617	0.591	0.025***	2.45	112,410
Conviction									
One Year	0.156	0.192	−7.71	144,654	0.154	0.229	−0.074***	−11.30	144,281
Two Years	0.189	0.306	−49.94	177,767	0.194	0.277	−0.083***	−29.76	174,796
Three Years	0.288	0.385	−13.60	115,879	0.288	0.424	−0.136***	−13.93	115,701
Return to Prison									
One Year	0.121	0.031	77.20	189,153	0.122	0.029	0.093***	55.84	186,055
Two Years	0.303	0.107	51.67	144,678	0.300	0.141	0.158***	23.25	144,304
Three Years	0.381	0.177	38.73	125,716	0.376	0.221	0.155***	17.94	125,503
Post-Prison Employment									
Employed within the first quarter	0.272	0.332	−10.80	144,678	0.275	0.281	−0.006	−0.84	144,304

***p<.001