

University of Cincinnati

Date: 2/27/2014

I. Mirlinda Ndrecka , hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Criminal Justice.

It is entitled:

The Impact of Reentry Programs on Recidivism: A Meta-Analysis

Student's name: Mirlinda Ndrecka

This work and its defense approved by:

Committee chair: Edward Latessa, Ph.D.

Committee member: Kimberly Sperber, Ph.D.

Committee member: Francis Cullen, Ph.D.

Committee member: Paula Smith, Ph.D.



9264

The Impact of Reentry Programs on Recidivism:
A Meta-Analysis

A dissertation submitted to the

Division of Research and Advanced Studies
of the University of Cincinnati

in partial fulfillment of the
requirements for the degree of

Doctorate of Philosophy (Ph.D.)

in the Division of Criminal Justice
of the College of Education, Criminal Justice, and Human Services

2014

by

Mirlinda Ndrecka

B.S. Charleston Southern University, 2002
M.S. Charleston Southern University, 2004

Dissertation Committee: Edward J. Latessa, Ph.D. (Chair)
Paula Smith, Ph.D.
Francis T. Cullen, Ph.D.
Kimberly Sperber, Ph.D.

ABSTRACT

The number of former prisoners returning to society has increased dramatically in recent decades, with more than 700,000 prisoners released from incarceration yearly. Research has shown that ex-prisoners are faced with a multitude of issues that make their reintegration into the community challenging. To assist offenders in their transition to their communities, considerable state and federal funds have been allocated for the development of reentry programs and initiatives. Reentry programs are very diverse both in the types of services that they provide for ex-offenders, and the treatment modalities that they employ in delivering these services.

Despite the considerable number of reentry programs, little is known about their effectiveness. Research on reentry programs has produced mixed results. Furthermore, only two comprehensive reviews of reentry programs have been conducted to date. Within this context, the current study focused on empirically answering two central questions regarding reentry program effectiveness: 1) Are reentry programs effective in reducing recidivism?, and 2) What factors are associated with reentry programs?

This dissertation used a meta-analytic approach to answer these questions. A total of 53 studies resulted in the coding of 58 distinct effect sizes. The overall mean effect size, the weighted mean effect size, and the respective confidence intervals were calculated to determine the overall impact of reentry programs on recidivism. Additionally, the impact of several moderating variables was also measured. The categories included reentry program type, phases included in the program, treatment modality, duration of treatment, location of treatment, presence of aftercare, risk level of offender, type of treatment provider, and methodological quality of the study.

The results indicate that on average, reentry programs reduce recidivism by six percent. Consistent with prior research, the results indicated that reentry programs that initiated treatment while the offenders were incarcerated and continued into the community had a greater impact on recidivism than programs that were limited to pre- or post-release. Programs that targeted high risk offenders, were offered by criminal justice agencies, adhered to a therapeutic community treatment model, and were at least 13 weeks in length were associated with a significant impact on recidivism. In terms of methodological quality, the findings were in line with previous studies that found smaller impacts on recidivism from more methodologically sound studies. Lastly, voluntary or mandatory program attendance and an aftercare component had no significant impacts on recidivism.

ACKNOWLEDGEMENTS

This dissertation would not have completed without the support and guidance of many individuals. First, I would like to thank Dr. Edward Latessa, my mentor and dissertation chair, who not only helped with this dissertation but also provided numerous opportunities for me during my time at UC. I am extremely thankful for the advice, the encouragement, and the occasional, much needed nudge to help me complete the program. Thank you for writing countless recommendation letters for me, and for giving me opportunities to learn both the academic and applied side of the field. I consider myself lucky to have had such an unbelievably accomplished advisor. Second, I must thank Dr. Paula Smith. Thank you for your advice and patience with me through the years. I will always be obliged to you for taking the time to encourage me not only on the dissertation, the program at UC, and my academic career, but also about life in general. Third, Dr. Francis Cullen, thank you for your patience, and your advice throughout my time at UC. Thank you for showing me that random acts of kindness are still possible. Additionally, Dr. Kim Sperber, you have taught me so much throughout the years I worked with you. I thank you for your willingness to answer all my countless questions, to assist me with anything I needed during my time at Talbert House, and for continuing to help me to this day. Finally, I need to thank Dr. Deborah Koetzle, for coding the studies and for providing invaluable advice and support throughout this whole process. I hope that we can continue to work together on many more projects in the future. Finally, many, many thanks to Dhimiter Tole for very patiently explaining all the statistical questions that I had. Your help and kindness is very much appreciated.

I must also thank the staff at the criminal justice department, in particular Erin Cochran, Jean Gary, Janice Miller, John Schwartz, and Carrie Sullivan for all the help and support throughout the years that I was at UC. Thank you for always taking good care of me.

I could not have completed this dissertation without the support and help of my friends. Cheryl, there are no words to describe how thankful I am to have you as a friend. Your support has always been unwavering regarding both my academic and personal life. I would be lost without your assistance and answers about this dissertation, and our discussions and chats about life and friendships. You have been always been there for me whether it was to celebrate or to lend a shoulder to lean on, and I feel privileged to call you my friend. Erin, I cannot thank you enough for all the support you have given me throughout the years. I am so thankful that what started as a collaboration to get through the comprehensive exams, turned into one the closest friendships of my life. Thank you for the phone calls, the long chats, the cards, and the care packages (tea samples!). My last years at UC would not have been the same without our discussions of young adult literature, guacamole, kraft beer, and superhero movies. Rebecca, I must also thank you for always being there to congratulate me when good things happened and to support me through the tough times. Thank you for always being there no matter what. It is hard to find friends with whom you fall right back into the routine whether you see them days or months apart, and I always feel like no time has passed by every time we get together. I am so glad to have you in my life. Rob, thank you for your friendship, and for always believing in me. I am so glad that I found a true friend in such random situations. I know we will continue our friendship for years to come.

Lastly, none of this would have been possible without the support and encouragement of my family. Mom, Dad, and Olisa, thank you for letting me live the life that I wanted to live. You have supported me every step of the way, and you have always believed in me. I am forever grateful for all the sacrifices you have made. I know that it has not been easy at times, and I want to thank you for all the understanding that you have shown throughout the years. Faleminderit dhe ju dua shume.

TABLE OF CONTENTS

CHAPTER 1	1
Introduction.....	1
Effectiveness of Reentry Programs: Mixed Results.....	4
Meta – Analysis	7
Advantages of Meta – Analysis	9
Criticisms of Meta – Analysis.....	10
Current Study	11
Research Questions.....	13
Summary	13
CHAPTER 2	14
Introduction.....	14
The American Prison Population	14
The Beginnings of Parole and Indeterminate Sentencing	15
The Tide Turns – Abolition of Indeterminate Sentencing and Parole	18
The End of Parole – The Establishment of Sentencing Guidelines	20
The Impact on Prison Population.....	22
The Role of Parole Revocation in Prison Growth.....	24
Characteristics of Ex-Prisoners.....	26
Mental Health.....	28
Substance Abuse	28
Health and Diseases	29
Housing and Homelessness.....	30
Education	31
Employment.....	31
Families and Children	33
Responding to the Ex-Prisoner Needs	34
The Diversity of Reentry Programs	36
Halfway Houses	37
Employment and Work Release Programs	39
Substance Abuse Programs	42
Reentry Courts	44
Housing and Homelessness Programs	47
Violent Offender Programs	49
Programs for Female Offenders.....	50

Research on Reentry Programs – Mixed Results.....	53
Evaluations of Standalone Reentry Programs.....	54
Evaluations of Multi-Site/Multi-Agency Programs.....	57
Comprehensive Studies of Reentry Programs.....	59
Reentry Program Research.....	61
Issues with Definition.....	61
Issues with Program Outcomes.....	62
Summary.....	64
CHAPTER 3.....	66
Introduction.....	66
Research Questions.....	66
Meta – Analysis.....	67
Advantages of Meta-Analysis.....	70
Magnitude of the Effect.....	70
Moderating Variables.....	70
Managing Large Amounts of Data.....	71
Replication.....	71
Policy Implications.....	72
Disadvantages of Meta-Analysis.....	72
Publication Bias.....	72
Mixing Apples and Oranges.....	74
Garbage In and Garbage Out.....	74
Multiple Effect Sizes.....	75
Current Study.....	77
Definition of a Reentry Program.....	77
Sample of Studies.....	78
Eligibility Criteria.....	80
Dependent Variable.....	81
Moderating Variables.....	81
Study/Publication Characteristics.....	81
Sample Demographics.....	82
Treatment/Program Information.....	83
Follow-up Information.....	85
Statistical Information.....	85
Methodological Quality Index.....	86
Analysis.....	87

Inter-Rater Reliability	87
Effect Size Estimates	88
The Q Statistic.....	90
Binomial Effect Size Display (BESD).....	91
Fail-Safe N Estimation.....	92
Moderating Variables.....	93
Summary	94
CHAPTER 4	95
Introduction.....	95
Publication and Reentry Program Characteristics.....	95
Publication Characteristics.....	95
Sample Characteristics.....	98
Risk of Sample.....	102
Program Characteristics	110
Follow-up Information.....	114
Comparison Group Characteristics	116
Reentry Program Effectiveness.....	119
Overall Effect Sizes	119
Without Outliers.....	121
Fail-Safe N.....	123
Moderating Variables.....	123
Program Phases.....	123
Treatment Location.....	125
Mode of Treatment in the Community	127
Type of Program	129
Program Modality	131
Offender Risk.....	135
Length of Program	137
Program Characteristics.....	137
Methodological Quality of Study.....	142
Conclusion	142
CHAPTER 5	144
Introduction.....	144
Summary of the Findings.....	145
Policy Implications	154
Limitations of Current Study	158

References.....	160
APPENDIX A.....	173
APPENDIX B.....	189

LIST OF TABLES

Table 3.1. Descriptive Statistics: Publication Characteristics for Reentry Studies	97
Table 3.2. Descriptive Statistics: Sample Characteristics.....	100
Table 3.3. Descriptive Statistics: Risk Variables	103
Table 3.4. Descriptive Statistics: Program Characteristics.....	106
Table 3.5. Descriptive Statistics: Follow-up Information	115
Table 3.6. Descriptive Statistics: Comparison Groups.....	118
Table 3.7. Reentry Program Effectiveness	120
Table 3.8. Reentry Program Effectiveness With and Without Outliers.....	122
Table 3.9. Reentry Program Effectiveness by Number of Program Phases	124
Table 3.10. Reentry Program Effectiveness by Treatment Location.....	128
Table 3.11. Reentry Program Effectiveness by Mode of Delivery in the Community.....	130
Table 3.12. Reentry Program Effectiveness by Type of Program	133
Table 3.13. Reentry Program Effectiveness by Program Modality	134
Table 3.14. Reentry Program Effectiveness by Offender Risk.....	136
Table 3.15. Reentry Program Effectiveness by Length of Program	138
Table 3.16. Reentry Program Effectiveness by Program Characteristics.....	139
Table 3.17. Reentry Program Effectiveness by Methodological Quality of Study	140
Table B.1. Listing of Study Year, Effect Size and Sample N.....	189

CHAPTER 1

STATEMENT OF THE PROBLEM

Introduction

At the end of 2010, federal and state corrections housed over 1.6 million prisoners. This figure translates to roughly one in every 201 U.S. residents (Guerino, Harrison, & Sabol, 2010). The population of offenders is also growing increasingly diverse with nearly 800,000 juveniles involved with the juvenile and adult correctional systems (Osgood, Foster, & Flanagan, 2005; Harrison & Karberg, 2003), and approximately 113,462 women held in both federal and state correctional facilities as of 2009 (West & Sabol, 2011).

Most of these individuals, approximately 95 percent of them, will be released back to their communities at some point (Hughes & Wilson, 2002; Petersilia, 2003), and the numbers of released individuals continue to grow at a staggering pace. Thus, during 2010, state and federal prisons released 708,677 sentenced individuals. This number is an increase of nearly 20 percent when compared to the figures from 2000 (Guerino et al., 2010). The figures are on the rise for women also, with a 22 percent increase in the number of incarcerated women from 2000 to 2010. This resulted with at least 712,000 women on probation and 103,000 women on parole at the end of 2010 (Glaze, Bonczar, & Zhang, 2010). At the same time, each year jails release approximately nine million individuals (Beck, 2006). Overall, 4.9 million individuals were on probation or parole at the end of 2010 (Glaze et al., 2010).

While the statistics are overwhelming, of more concern is the status of these individuals when they return to their communities. A number of reentry studies have found that returning prisoners have many barriers to achieving successful re-integration into society. According to Petersilia (2003), prisoners returning home will have served longer sentences than in the past, are

more likely to have a substance abuse or mental health problem, are less educated, and have no or little skills and qualifications that make them employable. Furthermore, many prisoners do not have substantial support networks or adequate living arrangements upon their return to society (Nelson, Dees, & Allen, 1999; Petersilia, 2004; Seiter & Kadela, 2003).

In an effort to address these issues, states have developed programs and policies to aid ex-prisoners in making their reintegration into society smoother. Some states enroll prisoners into programs when they are nearing the completion of their sentences. In some instances, inmates will complete a portion of the program in prison followed by an aftercare component in the community (Altschuler & Armstrong, 2002). In other instances, programs are offered entirely in the community while the offender remains under the supervision of parole boards or probation agencies. Many states have enacted reentry initiatives under which offenders are enrolled into treatment services in addition to community supervision. Such initiatives include collaboration with a multitude of agencies in the community that offer programs for drug abuse, mental health, job readiness, employment services, and so forth (Josi & Sechrest, 1999; Burraston, Cherrinton, & Bahr, 2010; Kesten, Leavitt-Smith, Rau, Shelton, Zhang, Wagner, & Trestman, 2012).

Furthermore, some states have developed work release and furlough programs during which the prisoners are permitted to go out and work in the community while they still reside inside the prison. These programs are available for offenders nearing their release date, the logic behind them being that the security of the community is being preserved by keeping the offenders' time structured and monitored, while at the same time allowing them to develop ties to the community and get to acclimated to life outside the prison (Petersilia, 2003).

Halfway houses are also consistent with the philosophy of reintegrating offenders while mindful of public safety. They are residential transitional facilities in which offenders who are

“halfway out” reside while they complete the last months of their sentence (usually about six months). During this time offenders are provided with the basic necessities while they look for housing and employment to establish themselves in the community (Petersilia, 2003).

Additionally, many halfway houses offer treatment programs for offenders in an attempt to further facilitate their transition in the community (Lowenkamp & Latessa, 2002; Latessa & Allen, 1982).

Other transitional correctional facilities include day reporting centers, which typically accept offenders in their last six months of their sentence. Offenders usually start by reporting daily to the facilities while they look for employment, and with time (if compliance to the requirements is observed) they are downgraded to less frequent reporting. At the same time, offenders can be referred to treatment (i.e., drug abuse, education) that addresses their needs (Petersilia, 2003).

The recent years have also seen the development of reentry courts. These courts are very similar in philosophy and structure to drug courts and were modeled after them. They manage the return of offenders into the community by assessing their needs and referring them to appropriate programming. At the same time, offenders are placed under the authority of the court, required to fulfill all the court orders, and sanctioned for non-compliance (Wilkinson, 2001).

Additionally, starting in the early 2000’s and continuing into this decade the federal government has allocated substantial funds toward the startup of many reentry programs. In 2008 President George W. Bush signed into law the Second Chance Act. The purpose of this Act is to provide funds for the development of programs by state or federal agencies that would assist ex-prisoner in their transition back into society. These programs are very diverse in the factors that

they target and in the type of treatment modalities that they use. They also employ a multi-agency approach, in that different agencies are enlisted in preparing the offenders for a successful reentry (sources from <http://www.nationalreentryresourcecenter.org>). In 2012, the Federal government allocated \$58 million towards the Second Chance Act for the development and evaluation of reentry services and programs (sources from <http://www.bja.gov>). Lastly, in January 2011, Attorney General Eric Holder announced the creation of the Reentry Council whose purpose is to bring together a multitude of Federal agencies in working towards helping ex-offenders reintegrate back into society while keeping the communities safe (see also <http://www.nationalreentrysourcecenter.org>).

Effectiveness of Reentry Programs: Mixed Results

The implementation of many reentry correctional programs, especially in the last decade, has created a need to be informed on the effectiveness of such programs. Studies on reentry programs have produced somewhat conflicting results. Evaluation of the Serious and Violent Offender Reentry Initiative (SVORI) for the state of North Dakota revealed that offenders that participated in the program were referred to more community based services than the regular parole counterparts. Reentry program participants were less likely to get rearrested and less likely to test positive for drug use while on parole. However, the parole revocation rates were similar to the comparison group rates (Bouffard & Bergeron, 2006).

Josi and Sechrest (1999) evaluated the effectiveness of “Lifeskills ’95” programs, a treatment program used with high risk young offenders. Parolees that were assigned to “Lifeskills’95” were enrolled into a 13 week curriculum-based treatment. The program sought to uncover the antecedents of their behavior and improve their chances of successfully completing

parole by participating in structured lectures and group discussions. The study showed that the program was successful in reducing recidivism rates during the period of program participation.

Because a growing number of offenders with mental illnesses are involved in the criminal justice system, there are a number of reentry programs that make mental health treatment a pivotal part of their treatment. In evaluating the effectiveness of one of these programs Kesten, Leavitt-Smith, Rau, Shelton, Zhang, Wagner, and Trestman (2012) examined differences between inmates who received services from the Connecticut Department of Mental Health and Addictions Services (DMHAS) versus those who received standard planning services from the Connecticut Offender Reentry Program (CORP). The results showed that offenders that received substance abuse and mental health services and treatment were half as likely to get rearrested within six months of discharge as the offenders who had not received these services. The authors concluded that mental health and substance abuse treatment should be an integral part of reentry services.

Other studies have attempted to provide a more comprehensive review of reentry programs. Thus, Seiter and Kadela (2003) provided a comprehensive review of reentry programs using the Maryland Scale of Scientific Methods (MSSM) that was developed by Sherman, Gottfredson, MacKenzie, Eck, Reuter, and Bushway (1998) for the National Institute of Justice to identify crime prevention programs that work. The scale rates programs from one (weakest) to five (strongest) on overall internal validity. Based on this, authors concluded that programs that targeted drug abuse were also effective in reducing recidivism, while work release programs were effective in reducing the frequency and severity of future crimes. Furthermore, while vocational/job readiness programs were effective in improving employment skills and recidivism

rates, educational programs only increased educational achievement, but did not reduce recidivism.

Seiter and Kadela (2003) call attention to the fact that there is a shortage of evaluations of reentry programs. They maintain that for the field of criminology to fully understand what works in offender reentry, programs that offer reentry services need to be assessed. Petersilia (2004) agrees with these authors, yet she also cautions that using recidivism as the only measure of determining that a reentry program is “working” is too exclusive. For example, she argues that studies have found that children born to drug court participants are much less likely to be born addicted to drugs. This is an important impact of participating in a drug court program and it should not be ignored (Travis, 2003 as cited in Petersilia, 2004). Thus, reentry programs can have other ways of improving the offenders’ reintegration into the community, and these efforts are traditionally ignored by studies that look only at recidivism rates.

In their recent article about correctional interventions, Lee and Stohr (2012) also argue that in evaluating correctional programs, criminologists should look at other indicators of success rather than just reductions in recidivism. The authors point out that certain programs, while not looking at recidivism rates, have positive effects on the overall quality of life of offenders. Thus, studies have found that residential mental health treatment programs have reduced the occurrence of psychiatric symptoms in prisoners (Lovell, Johnson, Jemelka, Harris, & Allen, 2001). Some research (Buckaloo, Krug, & Nelson, 2009) also suggests that participating in exercise programs reduces anxiety, depression, and stress among offenders and can be a coping mechanism. Finally, Latessa (2012) asserts that employment programs are important in offender reentry. However, he maintains that the reason behind the continued ineffectiveness of these programs in reducing recidivism and preventing ex-offenders from going back to prison is due to

a lack of adherence to the principles of effective interventions in implementing such programs. Correctional programs, including employment programs, should focus on changing the cognitions and attitudes of offenders toward work and towards living a pro-social lifestyle.

Continuing in the same vein, Petersilia (2004) contends that while the “what works” literature has consistently shown that programs that adhere to the principles of effective intervention are effective in reducing recidivism, the findings are usually not considered by practitioners, policy makers, and task forces involved in developing reentry programs. Instead, reentry programs are seen as collaborative efforts between multiple agencies, and involve decision making processes by policy makers, institutional corrections, police and probation agencies, and service provider agencies.

While Petersilia (2004) cautions that correctional programs should not be implemented just because practitioners “believe” they will work, she argues that the amount of work and money that is poured into the implementation of the programs that are not based on the “what works” literature cannot and should not be ignored. She pushes toward a more comprehensive approach in designing successful reentry programs; one that marries the knowledge stemming from the “what works” literature, with the efforts of the criminal justice practitioners.

Meta – Analysis

According to Cullen and Gendreau (2000), examining correctional literature and its effectiveness can sometimes represent a challenge. Correctional programs vary tremendously in the type of treatment they offer, the type of offenders they are serving, the setting of the treatment program, its quality, and so forth. Therefore, studies that attempt to summarize effectiveness of multiple programs often face the daunting task of “making sense” of the

differences in programs and the conflicting findings, while at the same time indicating which programs “work”.

One way of summarizing literature on a particular subject is the narrative review method. The advantage of using this method in summarizing studies is that it allows the reviewers to focus on the details of individual studies, and by giving different “weight” to different studies the assessor can draw conclusions and interpret the findings on a topic as a whole. However, because much of this approach relies on subjective decisions from the reviewer, narrative reviews can often be biased on selecting studies suitable for review, give subjective “weight” to studies, make misleading conclusion about the findings of the study, and not consider mediating factors that contributed to study outcomes (Cullen & Gendreau, 2000; Wolf, 1986).

Another way of synthesizing the research on a given topic is by using the technique of meta-analysis. This technique involves “the application of statistical procedures to collections of empirical findings for the purpose of integrating, synthesizing, and making sense of them” (Niemi, 1985:5 as cited in Pratt, 2001). In other words, meta-analysis is a quantitative method of summarizing the body of literature on a particular subject (Cullen & Gendreau, 2000).

Meta-analysis was first used in the field of psychology (Smith and Glass, 1977) and is commonly used in the behavioral sciences (Wolf, 1986). However, its use has increased in the field of criminology and criminal justice during the last three decades. The process entails gathering and coding a number of empirical studies for a particular topic and then calculating an “effect size” of treatment on the outcome variable. Next, a mean effect size is calculated for all of the studies included in the meta-analysis. This shows the average “effect size” of that type of treatment on the outcome variables (Cullen & Gendreau, 2000).

In the field of criminology, meta-analytic studies have been used with a variety of topics since the late 1980s (Pratt, 2001). For instance, meta-analyses have been used in assessing the factors associated with effective correctional interventions for offenders (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990), examining the impact of including cognitive behavioral elements in juvenile programs (Izzo & Rozz, 1990), evaluating the predictors of job stress among correctional officers (Dowden & Tellier, 2004), weighing the cost effectiveness of privatizing prisons (Pratt & Maahs, 1999), estimating the accuracy of predicting recidivism of risk assessments instruments for women offenders (Smith, Cullen, & Latessa, 2009), and determining the impact of imprisonment on reoffending (Jonson, 2010).

Advantages of Meta – Analysis

Using the meta-analytic method over the traditional narrative review has several benefits. First, meta-analysis allows for a precise calculation of an effect size. Lipsey (1999) contends that many single evaluation studies have small statistical power as a result of small sample sizes. While the narrative review only calculates if a study has an effect or not, meta-analysis calculates the mean effect size of all studies included. By summing the effect size across different studies, meta-analysis corrects this problem and allows for significant effects that might be marginally small to be detected (Lipsey & Wilson, 2001).

Second, meta-analysis allows for multivariate analysis. This allows the researcher to assess whether study characteristics (e.g., sample size, treatment modality) influence the magnitude of the treatment effect. By coding these features and controlling for them in the analysis, the researcher can examine whether the treatment effect is strong or a product of methodology (Cullen & Gendreau, 2000; Lipsey & Wilson, 2001). Third, the coding decisions of meta-analysis are public and open to scrutiny from other scholars. Studies can be replicated on

either the same data set or on a different data set, allowing other scholars to examine whether the conclusions drawn are reliable (Cullen & Gendreau, 2000). Fourth and relatedly, the database for meta-analysis is dynamic, and studies can be added to it as they are published (Pratt, 2001). Finally, meta-analysis organizes large volumes of data and presents it in a concise and simple way. This contributes to what Cullen and Gendreau (2000) call “knowledge construction” where researchers are able to sort out and categorize knowledge about a particular topic, while at the same time allowing for the preservation of details.

Criticisms of Meta – Analysis

Despite the many advantages, meta-analysis, like any other methodological technique, has its caveats. Specifically, Glass, McGaw, and Smith (1981) identified four main weaknesses of this technique. First, meta-analysis has been criticized for mixing well-designed studies with poorly designed ones. Critics argue that this makes the results produced by the meta-analysis difficult to interpret. Cullen and Gendreau (2000) agree that this is a valid criticism and caution that more confidence should be placed in the results produced by methodologically sound studies; however, they argue that the meta-analysis addresses this problem during the coding of research studies. They maintain that if the coding guide is based on comprehensive theoretical concepts, then the differences in the research design can be controlled for during the analysis (also see Wolf, 1986).

A second criticism of the meta-analysis often referred to as the “apples and oranges” criticism points out that meta-analysis often include studies that differ greatly in their variable definitions, sample sizes and methods they employ. The coding guide, like in the previous instance, can account for this criticism and control for these differences during the analysis (Cullen & Gendreau, 2000; Wolf, 1986).

A third criticism of meta-analysis, also referred to as the “file drawer” problem, cautions that meta-analysis often relies on published studies, which are more likely to report significant results. Critics argue that meta-analysis produces effect sizes that are larger than what reality offers (Glass et al., 1981). The researcher, however, can address this concern by making sure to include a mix of both published and unpublished studies in the meta-analysis. Furthermore, statistical procedures such as the “fail safe N” have been developed that allow researchers to estimate the validity of conclusions drawn from the meta-analysis. Specifically, the “fail safe N” calculates the number of the null result studies that are needed to reverse the findings produced by the meta-analysis (Orwin, 1983).

The fourth criticism of meta-analysis identified by Glass et al. (1981) draws attention to the use of multiple outcomes from the same study. Outcomes are usually not independent of each other, so they inflate the sample size and muddle the effect sizes. Therefore, meta-analyses appear more reliable than what they realistically are. However, most researchers analyze the outcomes in separate analyses, which controls for sample size and the validity of the effect size (Wolf, 1986).

Lastly, Cullen and Gendreau (2000) caution that similar to other research, findings of meta-analyses do not guarantee that the results produced will be useful in being employed in the development of policy or programs. Nevertheless, meta-analysis is an important tool in organizing and summarizing research studies, and it has proven to have important influence in advancement of knowledge in the fields of medicine, education, and behavioral studies.

Current Study

The current study attempts to fill the gap in the knowledge that exists about the status quo and the effectiveness of reentry programs by using meta-analytic methods. Previous studies have

attempted to organize the research available on this topic; however, they have not done so in a comprehensive and quantitative manner. The diversity of reentry programs, and the multitude of goals they strive to achieve, provides a unique opportunity in assessing their effectiveness. This study provided a description of all the types of reentry programs offered to date and calculated the impact that these programs have on recidivism and on other outcomes considered important by reentry scholars and policy makers.

The size of the sample available for quantitative analysis was relatively small, 53 studies resulting in 58 effect sizes, with most of the evaluation studies published recently. However, studies of reentry programs have been found as early as the middle of the 1980s. Reentry programs are very diverse and address a multitude of issues (Petersilia, 2003; Seiter & Kadela, 2003). Therefore, an attempt was made to classify the reentry programs into different categories based on the needs of the offenders when released from prison and the types of services offered by the agencies that seek to address these needs.

Synthesizing the research provides an opportunity to dissect what factors are important in successful reentry, what areas need to be explored more by scholars, and what programs lack in theoretical support and whether they are based on potentially erroneous assumptions. Reentry programs also differ in the way they measure success (i.e., recidivism, reduced drug use, employment, improved mental health) and many of these outcomes have been directly linked by prior research to reductions in recidivism (Hartwell, 2004; Kesten et al., 2012). Therefore, an attempt will be made to identify and quantify all of these goals in the coding of the study outcomes.

Research Questions

While the number of reentry programs has exploded in recent years, to date, the impact of such programs as a whole on recidivism is still unknown. Because reentry programs are so diverse in the types of treatment and services they provide, it also becomes imperative to determine what factors are associated with reentry programs that are successful. Using meta-analytic techniques, this dissertation attempts to answer the ensuing questions:

1. Are reentry programs effective in reducing recidivism?
2. What factors are associated with effective reentry programs?

Summary

This chapter has provided a brief overview of reentry programs and the current status of the research on the effectiveness of reentry programs. The second chapter will further elaborate on what constitutes a reentry program and will provide a description of the most common types of reentry programs offered by correctional agencies. Chapter Three will focus on the methods used to conduct the current study, including finding and coding the studies included in the meta-analysis and the statistical techniques used in analyzing the data. Chapter Four will describe the findings of the paper, while the final chapter will provide a discussion of the results, the implications that these findings have for the research on reentry programs, and offer conclusions from the dissertation.

CHAPTER 2

REENTRY PROGRAMS, DEFINITION AND RESEARCH

Introduction

The significant increase in the number of offenders coming back to communities has amplified the number of programs offered by states and the federal government to help in the reintegration of these offenders. This chapter will outline the different types of reentry programs and review the evidence surrounding their effectiveness. First, the chapter will briefly review the changes in sentencing policies that influenced the increase in prisoner numbers. Next, it will outline the development of reentry initiatives by state and federal governments. In addition, it will provide a summary of the different types of reentry programs available for offenders. The chapter will then review the research on reentry programs and the factors that are considered important in prisoner reentry. Lastly, this chapter will recommend further research to assess the effectiveness of reentry programs.

The American Prison Population

The United States has the highest incarceration rates in the world. In 2009, there were 743 inmates per 100,000 U.S. residents. This figure includes offenders incarcerated in federal and state prisons and local jails. Meanwhile, the incarceration rates for more than half of the world's countries fall below 150 inmates per 100,000 (Walmsley, 2011). The mean incarceration rates for the world are 146 per 100,000, and those for the European Union states fall around 135 prisoners per 100,000 residents (Raphael, 2011; Walmsley, 2011). To put these figures in perspective, in 2008 the Pew Center calculated incarceration rates compared to the American adult population and estimated that on any given day, about one percent of the U.S. adult population is incarcerated in prison or jail, making the U.S. the "world leader in incarceration"

(as cited in Blumstein, 2011). Seen in another way, in 2010, one in 100 Americans was behind bars (Visher & Travis, 2011).

This has not always been the case in American corrections. In fact, until the mid-1970s American incarceration rates were comparable to those of the rest of the world (about 110 per 100,000) and they had been stable for half of a century (since the 1920s). However, a major shift in political and penal ideology, changes in correctional legislation that ended indeterminate sentencing and parole, reduced funding in the area of correctional programming, and the “coup de grace” delivered by the famous 1974 study by Martinson on correctional rehabilitation, gave rise to a number of factors that precipitated the increase in prison population. Consequently, since the mid-1970s the U.S. incarceration rate increased yearly by six to eight percent, reaching the figures that are seen today (Blumstein, 2011; Petersilia, 2003; Raphael, 2011; Seiter & Kadela, 2003; Travis, 2005).

The Beginnings of Parole and Indeterminate Sentencing

The turn of the 20th century brought about the flourishing of the social sciences and the development of more advanced methods of understanding human behavior. New findings on factors that influence human behavior, and more specifically criminal behavior, were embraced by American penologists and gave way to the establishment of a “new penology” and the treatment of offenders under the “medical model” (Cullen & Gendreau, 2000; Seiter & Kadela, 2003). In addition, Classical Criminology views that punishment should be based on the nature of the offense were abandoned for Progressive views of using treatment to cure offenders. The rehabilitative model was accepted as the correctional model and shaped American correctional procedures for more than a half of a century (Cullen & Gendreau, 2000).

According to the Progressive views, offenders were seen as “sick”. Criminal behavior occurred as a result of the sum of many psychological and social factors that were unique to each and every one of them. As such, the goal of the correctional system was to identify these factors, design individualized treatment for each offender, and help them reintegrate back into society. In treating offenders, criminal justice practitioners would employ their expertise and a hefty amount of discretion. Thus, after conviction offenders were usually placed under probation. Only if this proved unsuccessful would they be sent to prison where they would be submitted to more intensive treatment. While in prison, offenders were expected to earn their way back into the community by demonstrating good behavior. The prison officials would then make a decision to release them from prison under certain conditions, and if these conditions were not met, they could be returned to institutional confinement (Cullen & Gendreau, 2000; Travis, 2005).

The National Prison Association conference that met in Cincinnati in 1870 ratified these concepts and within a few years, states started passing legislation that involved the use of parole and indeterminate sentencing (Cullen & Gendreau, 2000). Under the system of indeterminate sentencing, the state legislatures established possible sentence ranges for criminal offenses. During the sentencing process, judges applied their discretion in assigning a lower and an upper limit to the offender’s prison sentence. Then, based on the offender’s performance in prison and participation in correctional programming, a parole board would determine whether the offender was rehabilitated and ready to return to the community. If deemed appropriate, the offender would be released into the community for the remainder of the sentence and have to abide by a set of rules determined by the parole board. Parole boards had control over the release date, the conditions of release and even in granting final discharge (Petersilia, 2003; Travis, 2005).

While the decision to release offenders into the community was made by parole boards, parole officers were the ones that ensured that the offender was abiding by the conditions of his/her release while helping him/her successfully reintegrate in the community. Thus, parole officers had a dual role that many viewed as paternalistic. On one hand, they provided counseling to the newly released offenders and helped them find housing and employment through their connections to the community. On the other hand, parole officers monitored the progress of offenders and reported to the parole boards on any infractions (Petersilia, 2003).

In 1885, Ohio enacted one of the first parole programs in the nation that allowed offenders to be released before the completion of their sentences. Shortly after, in 1907, New York became the first state to pass legislature regarding all components of a parole system including arrangements for granting early release, post release supervision, and conditions for parole revocation. By 1923, about half of prisoners released in the United States were under parole supervision and by 1942 all states and the federal government had adopted parole systems (Petersilia, 2003; Travis, 2005).

Since earning parole meant demonstrating change and good behavior, much attention was given to the in-prison treatment of offenders and their re-integration process into society. As a result, a vast array of correctional programs was introduced in the prison system. These included behavioral modification programs, vocational and education programs, group therapies, and work release programs. The majority of the correctional programs were mandatory, but had high rates of participation by offenders even when voluntary, in an effort to demonstrate good behavior for parole release purposes (Seiter & Kadela, 2003).

Thus, prisons ceased being seen as places where offenders were sent to be punished and started to be referred to as “correctional institutions”, where treatment was supposed to help

reintegrate offenders back into the community. These views were so widely embraced that in 1954, the American Prison Association changed its name to the American Correctional Association. Until the mid-1970s, the focus of the American penal system remained the rehabilitation and reintegration of offenders (Cullen & Gendreau, 2000). During the 1960s and 1970s more than 70% of offenders released from prison were on parole, and in some states parole releases made up for 95% of the released prisoners (Petersilia, 2003).

The Tide Turns – Abolition of Indeterminate Sentencing and Parole

In the early 1970s the use of parole and indeterminate sentencing started to draw much criticism and the system started falling apart. While no single incident is credited with the waning of support for parole, the coming together of many factors brought about the weakening, and ultimately, the demise of the parole system (Travis, 2005). To start, the unlimited discretion exercised in all stages of the criminal justice system started to be viewed as cruel and unfair. According to Rothman (1980), judges had much liberty in determining the sentences for offenders, and sometimes the length of the sentences for similar crimes was inconsistent and unjust (as cited in Petersilia, 2003).

Parole boards had unlimited discretion in outlining the conditions of parole for offenders. Traditionally, parole boards were comprised of individuals selected to serve on boards based on party lines, not prior experience or expertise in the criminal justice system. According to Rothman (1980), decisions to release offenders were based on the seriousness of the crime; however, there was no consensus on what constituted a serious crime. Parole board hearings were closed to the public and more often than not, decisions about the fate of offenders were made on personal convictions. Race and gender of offenders frequently affected these decisions, resulting in sentencing disparities (as cited in Petersilia, 2003).

Furthermore, there was little evidence on the effectiveness of correctional programming on subsequent criminal activity. In a famous study published by Martinson (1974), he examined 231 adult correctional programs (mostly educational) and their effectiveness on recidivism rates. Studies had to include a treatment and a comparison group and were published between 1945 and 1967. He concluded that with the exception of very few programs, the majority of correctional programs had no effect on reducing the recidivism rates of offenders. The correctional community had no idea on how to rehabilitate offenders, and rehabilitation per se was nothing but a “myth” (as cited in Cullen & Gendreau, 2000).

Martinson’s “Nothing Works” position gained popularity instantly and was published in major newspapers, magazines and journals. This served as another major blow to the indeterminate sentencing and parole system, since there was nothing to support the proposition that correctional institutions were preparing offenders for their release into communities (Petersilia, 2003). Simultaneously, many parolees were complaining about the fact that parole boards rarely considered their participation in programming as a condition for their release. They argued that being forced to attend programming in prison, and being at the mercy of parole boards for a release date, made their punishment crueler and more insufferable. Adding the fact that the in-prison behavior and programming also had no effect on future recidivism made it even harder to argue that the system was fair and unbiased (Petersilia, 2003; Travis, 2005).

In the political arena, the indeterminate sentencing and parole system came under attack from both liberals and conservatives. Conservatives were concerned with the leniency of parole boards. They argued that the parole boards coddled criminals and did not apply the punishments that they deserved. Now, armed with the backing of Martinson’s (1974) study, critics of the parole system argued that the criminal justice system should focus on the deterrence and

incapacitation of offenders, since their rehabilitation was unlikely. Critics maintained that attention should be given to the harm caused to society by the crime, and punishment should be based on the principle of “just desserts”. Furthermore, they proposed that indeterminate sentencing and individualized treatment should be replaced with specific penalties imposed for specific offenses, and the safety and security of society should take priority over the treatment of offenders (Petersilia, 2003; Travis, 2005).

While coming from a different stance, liberals attacked the indeterminate sentencing system also. A 1971 report by the American Friends Service Committee found major racial biases in judicial sentences delivered for similar offenses. The Committee argued that the unlimited discretion that was placed in the hands of the judges and parole boards had given way to intolerable discrepancies in sentencing and undermined the principles of justice of the American criminal justice system (as cited in Travis, 2005). Furthermore, they argued that forcing offenders to participate in programming was counterproductive (Seiter & Kadela, 2003). At the same time, liberals had also embraced the view that criminals were rational and calculated beings and were not influenced by treatment and programming. They proposed an end of indeterminate sentencing and a framework for uniform sentencing guidelines to ensure equal treatment for all offenders (Travis, 2005).

The End of Parole – The Establishment of Sentencing Guidelines

Ultimately, the attacks on indeterminate sentencing and parole worked. The focus of American penology shifted from rehabilitation and treatment of offenders to that of deterrence and incapacitation. The “medical model” lost its appeal, and criminals started to be viewed as calculating and rational individuals who weighed the gains and losses of participation in criminal activities. Treatment did not affect the decisions of these individuals, and as a result

incapacitation and deterrence were the only approach to protect the community (Petersilia; 2003; Travis, 2005).

The shift in ideology happened in both the academic and the political arenas. Calls to end indeterminate sentencing and parole started to be heard in every state. As a result, Maine became the first state to abolish parole in 1976, followed closely by California and Indiana (Petersilia, 2003). The first sentencing commission was established by Minnesota. The commission instituted sentencing guidelines for judges, limiting their discretion in sentencing offenders (Travis, 2005). California also passed a determinate sentencing law in 1977 and went as far as changing the state penal code wording to convey that the goal of incarceration was to punish offenders and not to rehabilitate them (Petersilia, 2003).

Sentencing guidelines were first used in 1980 in Minnesota, and shortly after many states followed the example. By 2002, 15 states had abolished parole, while 20 states had severely limited their discretionary power and the population of eligible parolees. Only 15 states retained parole boards with full discretionary powers, however even these states had minimum sentencing policies (Petersilia, 2003; Seiter & Kadela, 2003). Similarly, in 1984 the federal government passed the Comprehensive Crime Control Act that also marked the creation of the U.S. Sentencing Commission. The legislation abolished the U.S. Parole Commission and the federal government finished phasing out parole release in 1997 (Petersilia, 2003). By 1997, only 28% of offenders released from prison were released under parole supervision (as cited in Seiter & Kadela, 2003).

Furthermore, many states started adopting “truth-in-sentencing” laws that required offenders convicted of certain violent crimes to serve at least 85% of their sentence before being eligible for parole. Washington became the first state to adopt such legislation in 1984. While

radically curbing the discretionary powers of parole boards, truth-in-sentencing laws also dramatically reduced the amount of good time that offenders could obtain while in prison (Petersilia, 2003; Seiter & Kadela, 2003; Travis, 2005).

To encourage states in keeping offenders imprisoned to serve the majority of their sentence, in 1994 the U.S. Congress passed the Violent Crime Control and Law Enforcement Act. Under this Act, states that adopted truth-in sentencing laws could obtain federal grants to construct more prisons and jails (Ditton & Wilson, 1999). Encouraged by the incentive to obtain federal funds, states passed similar legislation. As a result, 28 states and the District of Columbia qualified for federal grants under these provisions by 1999 (Sabol, Rosich, Kane, Kirk & Dubin, 2002). The remainder of the states passed legislation that required a portion of the sentence served (in some cases it was 50% and in others 75% of the sentence) before allowing offenders to be considered for release (Ditton & Wilson, 1999).

Legislation that targeted repeat offenders was also added to this mix. In 1994, California passed a referendum proposition that required offenders convicted of multiple felonies to serve a life sentence in prison. The legislation was named the “Three Strikes and You’re Out” law and it passed with overwhelming popular support. In California, an offender could be sentenced to a lifetime in prison under this legislation for any third felony conviction, as long as the first two felonies were considered violent felonies. Other states and the federal government also followed suit and passed similar laws against repeat offenders, but the California legislation had the harshest provisions (Travis; 2005).

The Impact on Prison Population

As a result of the aforementioned policies, America saw an explosion in its prison population. Beginning in 1973, the imprisonment rates grew at a rate of six percent per year.

This growth continued for the next 30 year. Because of tougher sentencing laws, even crimes that would have resulted in a probation sentence in the past were now being mandated to serve minimum sentences in prison (Blumstein, 2011).

What is more puzzling is the fact that the incarceration rates also seemed uninfluenced by the change in economic conditions, or the change in crime rates. Thus, the incarceration rates kept climbing even during the first half of the late 1990s, when the economy was booming and the unemployment rate was at an all-time low. They also climbed during the recession of the early 1980s and the early 1990s. In fact, the U.S. built more prisons during those times. The picture is the same for the crime rates; imprisonment rates kept climbing during the early 1980s and the late 1990s when crime rates decreased, and when crime rates increased, incarceration rates increased also (Travis, 2005).

In addition, the “War on Drugs” arrests only aggravated the situation. According to Travis (2005), the per capita incarceration for drug offenses grew by 930% from 1980 to 1996. While in 1980 the arrest rate for drug crimes was fewer than 300 arrests per 100,000 adults, by 1996 this rate had climbed to 700 arrests per 100,000 adults. And because of the tougher sentencing policies, more of these arrests resulted in prison sentences. Thus, while in 1980 there were two prison admissions for every 100 drug arrests, by 1990 the number had risen to 10 prison admissions per 100 drug arrests. By 1996, the rate had fallen to eight admissions per 100 drug arrests, yet this figure was still four times higher than the 1980 rate.

On a general level, prison numbers grew substantially. In 1973, there were slightly more than 200,000 prisoners in state and federal prisons. By 2005, the prison population had climbed to 1.5 million (Visher & Travis, 2011). When analyzing the reasons for this growth, Blumstein and Beck (1999) attributed 15% of the increases to the increases in sentence length, 22% to the

increase in crime rate, and 63% to the increase of imprisonments per arrests (as cited in Travis, 2005). The time served by offenders in prison also increased from an average of 21 months served in 1993, to an average of 28 months for those released in 1998 (as cited in Travis, 2005). Therefore, even though incarceration rates slowed down during the first decade of the 21st century, there were 1.6 million offenders housed in state and federal institutions at the end of 2010 (Guerino, Harrison, & Sabol, 2011).

The Role of Parole Revocation in Prison Growth

Another factor that influenced the growth in the number of prisoners is what Visher and Travis (2006) call the phenomenon of “back-end” sentencing, which is the re-incarceration of former prisoners for parole violations. According to these authors, the increases in this type of incarceration have been more prominent than increases in imprisonment rates for new convictions. Thus, while the prison incarceration rates increased four times between 1980 to 2000, the number of offenders sent to prison for parole violations increased by seven times during the same time, from 27,000 incarcerations for parole violations in 1980, to 200,000 incarcerations for the same thing in 2000. Parolees coming back to prison contributed dramatically to the increase in the number of the incarcerated.

While determinate sentences were designed to keep dangerous offenders in prison longer for the sake of public safety, analyses of the data paint a different picture. In fact, violent offenders spent more time in prison in states that used discretionary parole release than in those that used mandatory release. An analysis by the Bureau of Justice Statistics revealed that male violent offenders spent an average length of 60 months prior to being released on discretionary parole versus the average 48 months served by those who received a mandatory sentence followed by parole. Also, violent women offenders served an average of 45 months prior to

discretionary parole release when compared to the 35 months served under mandatory sentencing (as cited in Petersilia, 2003).

Furthermore, Hughes, Wilson and Beck (2001) found that prisoners released by parole boards had higher success rates than those released through mandatory parole (as cited in Petersilia, 2003), even though these findings have not been consistent throughout other studies.. The shift in policy also resulted in a change in the focus of supervision of the newly released offenders. So while during the indeterminate sentencing era the focus of parole was to help parolees reenter society, surveillance and supervision became the priorities of the tough on crime era (Petersilia, 2003). This resulted in an explosion in parole revocations among the newly released prisoners (Travis, 2005). The tougher sentencing policies directly affected the number of offenders returned to prison for parole violations.

The majority of revocations among parolees occur as a result of technical violations. Thus, parolees are more likely to return to prison for failing to obey the conditions of supervision, than for committing a new crime. Conditions of supervision differ depending on the supervision agency, but they usually involve drug tests, maintaining employment, providing the supervision authority with a physical address at all times, and maintaining appointments with the supervising officer. A technical violation occurs when the offender fails to obey any of these conditions that can result in parole revocation and the return of the offender back to prison. Travis (2005) maintains that the shifts in policy directly increased the use of technical violations to send offenders back to prison. Thus, of all parole violators returned to prison in 2000, one third of them were returned for a new conviction, while the other two thirds were returned for a technical violation (as cited in Travis, 2005).

The trend in parolee re-incarceration seems to have remained more or less stable through the years. In fact, of all the offenders exiting parole in 2010, 23% of them were sent to prison as a result of a technical violation and only nine percent returned as a result of a new conviction (Glaze & Bonczar, 2011). In 2009, parole violators made up 33.1% of all prison admissions, with 35.2% of admissions in state prisons and more than eight percent of the federal admissions. At the same time, during 2010 parole releases from state and federal prisons increased by nearly 20% (708,677 offenders), when compared to the release rates of 2000. Considering the magnitude of these numbers, and the fact that 95% of all state prisoners will return to the community at some point (Hughes & Wilson, 2002; Petersilia, 2003), the situation is quite discouraging.

Some scholars have dubbed the phenomenon of parolee return to prison as “churning” (as cited in Travis, 2005). American prisons seem to recycle the same individuals, and while the recidivism rates of ex-prisoners have been high historically, the tough on crime policies increased the number of prisoners, which in turn increased the number of people that are released yearly under supervision. Coupled with the increase in technical violations resulting in returns to prison, the number of “churners” who fail to reintegrate back in the society has also increased (Travis, 2005). In fact, a study by the Pew Institute in 2011 looked at the recidivism rates in over 40 states and found that more than four out of 10 offenders returned to state prison within three years of release. Other studies show the same trend, nearly two thirds of released prisoners will be rearrested, and more than half will be re-incarcerated within three years of their release (Visher & Travis, 2011).

Characteristics of Ex-Prisoners

The first steps in launching the multitude of the reentry efforts and programs that have taken place in the last decade came as a result of a simple question asked in 1999 by then Attorney General Janet Reno: “What are we doing about all the people coming out of prison?”(Travis, 2005, p. xi). Figuring out the answer to this question launched a massive effort by both federal and academic researchers in finding out more about the status of the newly released offenders and the challenges that they faced in reentering their communities successfully (Travis, 2005). The following sections will outline the characteristics of returning prisoners.

Studies of ex-offenders have found that while the number of offenders released under parole supervision has increased yearly (as mentioned previously in this chapter), about 20% of these individuals are released in the community without supervision. This phenomenon is related directly to the enactment of the determinate sentencing policies by states and the federal government (Petersilia, 2003). Since the majority of ex-prisoners are re-institutionalized within three years, and because state spending on corrections has increased four times in the last two decades, the issue proves to be pressing. A study by the Vera Institute found that the United States spend \$50 billion per year in corrections – or one in every 15 general fund dollars. Most of this money is spent on institutional corrections, not on community corrections (as cited in Visher and Travis, 2011).

Research on ex-offenders has revealed that they are faced with a multitude of issues that make their reintegration into the community challenging. According to Petersilia (2003), inmates released from prison these days are predominantly more likely to have been in custody before, have lengthy histories of drug and/or alcohol abuse, are more likely to have experienced periods of homelessness, have almost non-existent employment histories, are more likely to have

physical or mental disabilities, and have young children with whom they have had infrequent contacts.

Mental Health

Self-report data of prisoners has revealed that in 2000, about 16% of the prison population had a mental health condition or had spent at least one night in a mental health facility (as cited in Travis, 2005). Furthermore, a study of more than 20,000 adults entering five county jails showed that 16.9% of the group had serious mental illnesses. The incidence of mental illnesses was 14.5% among males and 31% among females – a rate three to six times the mental illness rates found in the general population (Steadman, Osher, Robbins, Case, Samuels, 2009). The jail rate is comparable to the mental illness rates found among prisoners. A study by Hammett, Roberts and Kennedy (2001) found that the incidence of serious mental illnesses among prisoners was two to four times higher than it is in the general population.

Petersilia (2003) maintains that prisoners who suffer from mental illnesses have a tougher time adjusting to the life in prison. Often, they refuse to take their medication, or are not prescribed the correct dosage, and display hostile or aggressive behavior when the illness flares up. They are more likely to break prison rules and end up in segregation units for longer periods of times, which in turn worsen their mental health condition. To make matters worse, not all prisons screen automatically for mental illnesses. Only 70% of prisons screen for mental illnesses at intake, while only 65% conduct psychiatric assessments (as cited in Travis, 2005). As a result, many of these prisoners are returned to the communities completely unequipped to make a successful reentry (Petersilia, 2003).

Substance Abuse

More than three quarters of state prisoners report a history of drug and/or alcohol use (about 80% reported in 1997). In fact, more than half of the subjects in the same study reported being under the influence of alcohol or drugs when they committed the crime for which they were incarcerated. Another study found that three quarters of those returning from prisons have a history of substance abuse (Hammett et al., 2001). Among jail populations, 68% of inmates met the diagnostic criteria for drug dependence, and half of those convicted to a jail sentence had been under the influence of drugs or alcohol at the time of their offense (Karberg & James, 2005). In addition, a multi-state study of ex-prisoner experience found that 64% of respondents had used drugs or used alcohol to the point of intoxication at least weekly prior to being imprisoned. In Maryland, 41% of respondents reported using heroin daily, while in Texas 57% of the respondents reported daily use of cocaine (Solomon, Visher, LaVigne, & Osborne, 2006).

Furthermore, there is a strong link between substance abuse and re-incarceration. Thus, a 2004 study showed that 53% of prisoners incarcerated in state prison had a substance abuse history and had at least three prior sentences to probation or incarceration, while only 32% of inmates without a substance abuse problem had the same criminal histories (Mumola & Karberg, 2004). The figures were comparable with those of the jail populations where inmates with substance abuse problems were twice as likely to have three or more prior probation or incarceration sentences as other inmates (Karberg & James, 2005). Furthermore, Petersilia (2003) maintains that about 40% of first time offenders have a history of drug use, while the percentage increases to 80% with five or more convictions.

Health and Diseases

The frequency of infectious diseases is considerably higher among inmates in state prisons and local jails than in the general population. Data from 1997 show that ex-prisoners

released from prison or jail accounted for about one quarter of all people living with HIV or aids in the U.S. They also made up 29-32% of those diagnosed with Hepatitis C and 38% of those diagnosed with tuberculosis (Hammett et al., 2001; Petersilia, 2003). Furthermore, while the overall rate of confirmed AIDS cases in the general population was .17% in 2007, the rate among state and federal prison populations for the same year was .43% or 2.5 higher than the rate in the general population (Maruschak & Beavers, 2009). At the end of 2008, 1.5% of male inmates and 1.9% of female inmates in state and federal prisons were HIV positive or had confirmed AIDS. Confirmed AIDS cases made up 23% of all HIV/AIDS cases in state and federal prisons (Maruschack & Beavers, 2009).

Housing and Homelessness

The majority of prisoners return to living with their families after release. A 1999 study that followed 49 individuals released from New York State prisons found that 40% of them were living with a family member in the month following their release. Another study conducted in 2004 interviewed 153 ex-prisoners and found that 80% of them were living with a family member after their release (as cited in Travis, 2005). However, some research has shown that living arrangements can be temporary. Thus, Visher, Yahner and LaVigne (2010) found that seven months after their release 35% of ex-prisoners had lived at more than one address, while 52% believed that their current living arrangements were temporary. Furthermore, a proportion of the newly released prisoners end up in homeless shelters. According to a study of New York ex-prisoners, between 1995 and 1998 about 11.4% of released prisoners entered a homeless shelter within two years of their release (as cited in Travis, 2005).

Some prisoners enter prisons with a history of homelessness. Thus, a study by Metraux and Culhane (2004) found that more than 10% of inmates entering prisons or jails are homeless

in the months preceding their incarceration. The rates of homelessness are ever higher for those inmates who suffer from mental illness, approximately 20%. At the same time, prisoners who have a history of using homeless shelters are five times more likely to have a post-release shelter stay. Moreover, ex-prisoners who entered homeless shelters after their release from prison or jail were seven times more likely to abscond than those who had a more stable form of housing (as cited in Travis, 2005).

Education

Inmates exhibit low rates of education and poor literacy skills. The U.S. population has a four percent illiteracy rate, while some 21% are functionally illiterate. In contrast, 19% of prisoners are completely illiterate, and 40% are functionally illiterate (as cited in Petersilia, 2003). When looking at education level, 85% of the U.S. population has a high school diploma or higher, compared to just 49% of parolees (data from 1999). In addition, 11% of those released have an eighth grade education (as cited in Petersilia, 2003). When looking at prison and jail inmates as a whole, two out of five inmates do not have a high school diploma or its equivalent (Harlow, 2003).

Employment

Offenders have spotty employment histories before entering prison, and incarceration only exacerbates their future employment prospects after they are released from correctional institutions. A 2000 study by the Bureau of Justice Statistics found that 56% of prisoners had full time jobs before they were arrested. Also, another 12.5% had part-time jobs or were employed occasionally. However, 31% of state prisoners reported that they were unemployed the month prior to their arrest. Twenty-seven percent of federal inmates also reported being unemployed prior to incarceration (as cited in Petersilia, 2003; Travis, 2005). Furthermore, a comparison with

unemployment rates for the general population paints a more depressing picture. A study by the U.S. Department of Labor reported unemployment rates for 1997 at 8.5 percent. In comparison, the unemployment rate of the incoming prison population for that same year was 17.8% (as cited in Travis, 2005). Another three percent of state prisoners and five percent of federal prisoners had never been employed (as cited in Petersilia, 2003).

Another study on the work history of offenders reported similar findings. Conducted in 2004 by the Urban Institute, the study looked at work histories of prisoners in Maryland. Findings showed that 65% of prisoners had worked in the six months prior to incarceration. However, 46% of offenders had never held a job for more than two years, while 45% of them had been fired at least once previously (as cited in Travis, 2005). Furthermore, a study by Visher, Debus, and Yahner conducted in 2008 found that only half of offenders had ever held a permanent job, while 32% of them were unemployed in the six months prior to incarceration.

Prisoners also have a tough time finding employment after incarceration. Being employed is in many cases a condition of their supervision. Therefore, finding a job becomes a central focus of many offenders. Yet, the social stigma that is associated with incarceration is a barrier to finding legitimate employment for many of them, while the development of criminal patterns throughout their criminal careers hinders their ability to maintain employment (Petersilia, 2003; Travis, 2005). Thus, the same study from the Urban Institute found that 76% of the prisoners released from Maryland prisons worked for at least a month at the time of their interview (six months after release), while 72% were employed at the time of the interview. Of those employed 55% held full time jobs (Travis, 2005). On the other hand, a large three state study conducted by Uggen & Staff (2001) found that less than half of ex-prisoners had found a job upon their release. Yet other studies have found that job retention rates leave much to be desired. A study

by the University of Washington found employment rates of ex-offenders to be at 44% in the quarter following release, but the rates dropped to 26% within two years (Pettit & Lyons, 2003).

Families and Children

In 2002, one in 45 children had a parent in prison. This figure accounted for two percent of all minors in the U.S. and seven percent of all African American children (as cited in Travis, 2005). The figure increased slightly over the course of following years. Thus in 2007, more than 800,000 prisoners were reported parents of an estimated 1,706,600 children, which translates to 2.3% of the U.S. population under the age of 18. An estimated 52% of incarcerated parents are state inmates and 63% are federal inmates. The number of children with a father in prison has grown by 77% since 1991, while the number of children with a mother in prison has grown by 131%. More than half of the prisoners in state prisons (53%), and half of federal inmates have children age nine or younger. Moreover, 22% of the children of state inmates and 16% of the federal inmate children are age four or younger (Glaze & Maruschak, 2008).

Three quarters of incarcerated parents reported being in contact with their children, however the frequency of contact varied by the time they had left to being released. Thus, 47% of parents who would be released within six months reported weekly contact with their children compared to 39% of those expected to be released in 12 to 59 months, and 32% of those released after 60 months or more. Incarcerated mothers (about 40%) reported serving less time and being released in a shorter time than incarcerated fathers (about 25%) (Glaze & Maruschak, 2010).

Incarceration of parents has increased the incidence of family disruptions. Thus, research shows a strong association between imprisonment and divorce or separation (Huebner, 2005). Also, the parents that are left behind become burdened with extra financial responsibilities and with taking on additional duties (Geller, Garfinkle, & Western, 2011). In addition, because more

men than women are sent to prison, many communities are left with a disparity in the numbers of single men and women. The result is the increase in female headed households and a diminished role for the fathers in the lives of their children (Travis, 2005).

In addition, while in some cases the children might be better off when separated from the incarcerated parent (especially in the cases of substance abuse or physical abuse), more often than not, children of incarcerated parents have a higher likelihood of engaging in delinquent and violent behavior (Petersilia, 2003). Other research has found that children of incarcerated parents are more likely to develop relational attachment problems and have conduct and learning problems at school (Parke & Clarke-Stewart, 2002). Overall, the high incarceration rates have resulted in several harmful consequences for the families of the incarcerated (Travis, 2005).

Responding to the Ex-Prisoner Needs

During the last decade, offender reentry became an important issue in the correctional realm. State and federal government were faced with ever-increasing numbers of ex-prisoners returning to their communities, many of which were released without any further supervision. The high rates of parolee and ex-prisoner returns to prison, and the difficulties that these individuals faced upon release became a central concern of criminal justice agencies. Coupled with the concern for public safety, and overwhelmed state correctional budgets and resources, attention was directed to help returning inmates (Petersilia, 2004; Seiter & Kadela, 2003; Visher & Travis, 2011).

As a result, state and federal agencies allocated considerable funds in the development of reentry programs and initiatives in an effort to aid ex-prisoners to successfully reintegrate. Consequently, between 2001 and 2004 the federal government allocated over \$100 million to the states for the creation and expansion of offender reentry programs. In an unprecedented event,

President George W. Bush addressed the issue of prisoner reentry during the State of the Union speech in 2004, highlighting the difficulties faced by ex-prisoners. He launched the Prisoner Reentry Initiative (PRI), which was designed to help non-violent former prisoner find employment and housing upon their return to their communities. In 2005, the PRI awarded 30 grants amounting to \$19.8 million to agencies in 20 states (see also http://www.justice.gov/archive/fbci/progmenu_programs.html).

In addition, between 2001 and 2007 the U.S. Department of Justice allocated \$90 million to the Serious and Violent Offender Reentry Initiative (SVORI). This initiative concentrated on improving recidivism rates, employment, education, health, and housing outcomes for serious and violent, adult and juvenile, ex-offenders upon their release from incarceration. The funding was designed to help the development of new programs or the expansion of existing programs that combined post-release supervision efforts with reentry services. Money was made available to 69 grantees that operated 89 adult and juvenile programs throughout the 50 states and the District of Columbia (see also <http://www.nij.gov/nij/topics/corrections/reentry/about-svori.htm>).

Furthermore, in 2008, George W. Bush signed into law the Second Chance Act. The bill authorized \$165 million in grants to state and local agencies and non-profit organizations in providing services to make ex-offenders' journey from prison to the community a more successful one. The Act's provisions required agencies to use the funding in providing ex-prisoners with employment and housing services, substance abuse treatment, family programs, mentoring programs, and victim services. The Act also allocated funds for reentry-related research and best-practices program training and support services. Since 2009, over 300 government agencies and non-profit agencies from 48 states have received grant funds from the

Second Chance Act for the development of reentry programming and services for both adult and juvenile offenders (see also www.reentrypolicy.org).

More recently, in January 2011, Attorney General Eric Holder established the Federal Interagency Reentry Council. The council brings together 20 federal departments and agencies in working towards keeping communities safe while assisting those individuals who are returning from prison and jail in successfully reintegrating into their communities. Goals of the Reentry Council include: identifying federal policy barriers in improving outcomes for reentry populations, identifying and supporting reentry initiatives and programs, and promoting federal statutory and policy changes in helping ex-offenders reintegrate successfully (see also www.reentrypolicy.org).

The Diversity of Reentry Programs

As a result of federal and state governments' funding efforts, recent years have witnessed the development of a myriad of reentry programs and services. Because ex-prisoners are faced with multiple issues and needs when they are released from correctional institutions, reentry programs tend to be very diverse in the types of services that they provide and the treatment modalities that they employ in assisting their target population (Petersilia, 2003; Visher & Travis, 2011). Thus, some reentry programs begin working with offenders prior to their release and continue to offer aftercare services throughout the community transition (Wilson & Davis, 2006). Other programs provide services once the offenders are in the community (Redcross, Millenky, Rudd, & Levshin, 2012; Wikoff, Linhorst, & Morani, 2012).

Furthermore, certain reentry programs provide services only in one area of need such as employment, substance abuse, behavioral and cognitive skills, or mental health (Kesten et al., 2012; Redcross et al., 2012; Robbins, Martin, & Surrat, 2009; VanVoorhis, Spruance, Ritchey,

Listwan, & Seabrook, 2005), while others offer a variety of services (Bouffard & Bergeron, 2006; Wilson & Davis, 2006; Zhang, Roberts, & Callanan, 2005). Programs also differ in their length, some providing services over a matter of months to years (Knight, Simpson, Chatham & Camacho, 1997) or only a few days or weeks (Redcross et al., 2012; Wilson & Davis, 2006). Lastly, some reentry programs provide services for all types of offenders (juvenile, adult, male and female), while others have a specific target population (Josi & Sechrest, 1999; Lattimore & Visher, 2009). The following sections will provide a brief description of the different types of reentry programs and the different approaches that correctional entities have taken in the implementation of reentry initiatives.

Halfway Houses

Halfway houses are residential transitional facilities used to house offenders that are either coming back to their communities from prison or offenders ordered to a community sentence that have violated the terms of their sentence. In this sense, halfway houses can serve as “halfway-into-prison” and “halfway-out-of-prison” facilities (Latessa & Allen, 1982). Gaining popularity in the 1950s and 1960s, halfway houses were fairly common in the 1970s and used as an alternative to incarceration for offenders sanctioned to a community sentence struggling to keep in line with the conditions of their supervision, or as way of reintegrating offenders coming back from prison into their communities (Latessa & Allen, 1982).

The theoretical structure of halfway houses is consistent with the reentry framework: gradual integration of the offender in the community is facilitated through the provision of services that make the transition of the offender a more successful one. Offenders can be released to the community on parole and live in the halfway house for the first few months as part of their transition. In other cases, offenders are released to halfway houses during the last months of their

sentence (usually the last six months) and their progress is monitored through the halfway house staff (Latessa & Allen, 1982; Petersilia, 2003).

The process of transition is viewed as an important one, as the offender regains some of the autonomy that is lost during imprisonment. At the same time, the stint in the halfway house can also be used to deliver the aftercare portion of the treatment that the offender might have received in prison. The offender is required to comply with the conditions of release and monitored carefully. If the transition is deemed successful, then the supervision is downgraded and the offender is released to the community (Latessa & Allen, 1982; Hamilton & Campbell, 2013).

In the past, especially from the 1950s through the 1970s, halfway houses provided the basic necessities, such as food, clothes, and a place of residence for ex-prisoners. Meanwhile the offender was required to obtain employment and acquire a permanent residence (Latessa & Allen, 1982; Petersilia, 2003). However, in recent years halfway houses have also provided an array of programs for offenders making the transition from prison. Treatments include employment readiness, educational services, and substance abuse programs. Some halfway houses also provide specialized treatment, such as mental health services and sex offender treatment (Latessa, Lovins, & Smith, 2010). Yet other facilities provide faith-based treatment services that attend to the offenders' spirituality and religion (Willison, Roman, Wolff, Correa, & Knight, 2010).

The Ridge House in Reno, Nevada is an example of a halfway house reentry program. Inmates from four Nevada prisons apply to the Ridge House shortly before their release date and if accepted, the average length of stay is about three months. The program is faith based and primarily offers substance abuse and employment services to ex-prisoners. However, a wide

range of other services are also offered to offenders, such as parenting classes, financial management, health education, and mental health evaluation. In addition, Ridge House staff can refer clients to services in other agencies as needed (Willison et al., 2010).

Employment and Work Release Programs

Employment reentry programs are also diverse in the nature of services they provide. The most common types of reentry employment programs are work release programs and transitional job programs. Typically, work release programs take place while the offender is still incarcerated and nearing the end of his/her sentence, while transitional job programs take place after the offender has been released in the community under parole supervision, or has completed the sentence and is released in the community without supervision. However, both types of programs attempt to ease the transition of the offender into the community by providing them with wages, and in some cases providing additional help in finding housing (Turner & Petersilia, 1996; Redcross, Bloom, Jacobs, Manno, Muller-Ravett, Seefeldt, Yahner, Young, Jr., & Zweig, 2010).

The first type of employment programs, work release programs, has been around since the early 1920s. Because offenders have few marketable skills and spotty employment histories, they have a difficult time securing employment once they leave prison. Work release programs were designed to teach inmates how to work productively and acquire some funds when they are nearing their release. The idea behind work release programs is that offenders will acquire the positive working habits and maintain them even when they are not under supervision (Turner & Petersilia, 1996; Petersilia, 2003).

An example of such a program is the Washington state's work release program, first established in 1967. The Washington Department of Corrections contracts with different residential work release facilities that provide bed space for offenders who qualify for the

program (Turner & Petersilia, 1996). Both males and females are eligible for work release, and one facility offers residence with a nursery where women offenders can care for their children while securing employment. In addition, eligible offenders have to be within six months of their release date and be considered a minimum security concern based on a behavior-driven classification process. Offenders pay a portion of the room and board with the wages they acquire through their jobs, and they can also participate in treatment programs, family-oriented groups, and other support groups while in the program. They have to abide by the conditions of their reentry plans, which can include completion of certain programs, and they are subject to random drug screens. In addition, offenders have restricted movement privileges, only being allowed to leave for work or on supervised family outings (see also www.doc.wa.gov).

On the other hand, transitional job programs work with offenders who have been released on parole. The programs provide transitional jobs for offenders while they look for more permanent positions. At the same time, participants are provided with employment training opportunities, such as resume writing and job interview skills, and can be required to attend other programs that are designed to facilitate their reentry, such as fatherhood groups meetings. Other programs can also provide referrals to housing and other assistance programs (Redcross et al., 2010; Redcross et al., 2012).

One such program is the Center for Employment Opportunities (CEO) that provides paid work for about 2,500 parolees returning to New York City immediately after being released from prison. Parolees are referred to the program by their parole officers and are required to attend a five day pre-employment class. Directly after class completion, participants are placed in transitional, paid positions. They work in crews performing maintenance and repair work for city and state agencies in New York City. Participants work four days a week and are paid

immediately after the completion of a day's work (minimum wage rates). On the fifth day, participants are required to go to the CEO's offices and meet with staff. They can also partake in additional activities, such as parenting programs, or programs that assist with child support orders (Redcross et al, 2012).

The CEO program focuses mostly on employment services, but at times participants can be referred to other providers that offer housing assistance or substance abuse treatment. The work of the participants is constantly evaluated by both their work site supervisors, who are also CEO employees, and the office based staff (called job-coaches). Work site supervisors monitor participants' job performance and any inappropriate behaviors, while the job coaches help them with resume building and prepare them for job interviews. Job coaches start assessing the parolees for "job readiness" after two weeks in the transitional job and help them get permanent positions as soon as possible. Job readiness is measured through performance on the work sites and the demonstration of behaviors during the meetings with the job coaches (Redcross et al., 2012).

A similar program to the CEO is the Transitional Job Reentry Demonstration which was implemented in four cities: Chicago, Detroit, Milwaukee, and St. Paul. While the programs in the different cities vary somewhat from each other, they all have some basic similar components. Thus, participants in the programs are provided with temporary, minimum wage jobs that offer 30 to 40 hours of paid work per week. The transitional jobs are not designed to teach participants any skills in a particular occupation. Instead they are aimed to identify the issues and behavioral problems that can arise in the workplace (Redcross et al., 2010).

In addition, the program helps the participants find permanent employment by teaching them how to write a resume, fill out job applications, and prepare them for job interview

questions. Some locations provide job leads for the offenders, and some programs provide participants with referrals for housing and other assistance programs. Also, one of the locations offers participants employment retention incentives once they obtained permanent employment. The incentive payments could total up to \$1,500 over the course of six months (Redcross et al., 2010).

Substance Abuse Programs

Many reentry programs offer treatment modalities for offenders who have substance abuse problems. Substance abuse programs aimed at reentry populations can also come in a variety of forms. For instance, nowadays many halfway houses offer substance abuse treatment services for the offenders that are coming back to their communities (Lowenkamp & Latessa, 2005; Latessa et al., 2010). In addition, non-profit community based organizations offer substance abuse programs. Courts often contract with these agencies and ex-prisoners are required to attend treatment as part of their conditions of release (Heilbrun, DeMatteo, Fretz, Erickson, Gerardi & Halper, 2008). In other instances, conditions of parole require ex-prisoners to move to and live for a period of time in a community corrections facility (CCF) as part of their parole release. Just as in halfway houses, substance abuse treatment is often part of the modalities that community corrections facilities provide to their clients (Heilbrun et al., 2008).

One of the most commonly used reentry-focused, drug treatment modalities is the therapeutic community (TC). Therapeutic communities usually involve three stages of intervention. The intervention begins while the offenders are in prison, then treatment is continued while offenders are released into the community (usually in a residential treatment community facility), while the third phase consists of aftercare treatment – the offenders are under the supervision of parole or probation agencies, but they continue to attend substance

abuse aftercare services (Inciardi, Martin, Butzin, Hooper, & Harrison, 1997; Wormith, Althouse, Simpson, Reitzel, Fagan, & Morgan, 2007).

The Delaware Key-CREST in-prison program with a work release component and aftercare is an example of such a program. The program has been operating since the 1990s and is designed to serve both men and women. The KEY is the in-prison therapeutic program, and the CREST outreach Center is a residential work release center for men and women. The program is designed to accompany the offender's change of status from prison to work release/residential treatment to parole or community supervision. The first phase of the program begins while the offenders are incarcerated. Participants in the therapeutic program are segregated from the rest of the prison (Inciardi et al., 1997; Robbins, Martin, & Surrat, 2009).

During the 12 months of the first phase, offenders are constantly exposed to substance abuse treatment and learn to develop pro-social attitudes. During the second phase, offenders are released to a TC in a work release residential facility that is located in the community. They continue substance abuse treatment in this phase while they complete their work release program. Lastly, in the third phase, offenders are released under community supervision, but continue to come to the residential facility center to attend weekly groups. They are also required to maintain constant contact with their counselors, and spend one day per month at the facility (Inciardi et al., 1997).

Variations of the program have been developed in other states. Thus, in Illinois, the Sheridan Correctional Center TC requires participants to have an institutional work assignment while they are completing the in-prison phase of the program. The inmates' time is highly structured with a variety of groups that include drug treatment, cognitive restructuring programs, process groups and aggression management or domestic violence (depending on their needs).

Upon release, offenders are placed under the care of a community-based agency, which provides service referrals and case management. As part of the program, offenders are required to attend some type of aftercare program, whether it be residential or outpatient in nature (Olson, Rozhon, & Powers, 2009).

Similar programs include the Kyle New Vision in-prison TC program in Texas (Hiller, Knight, & Simpson, 1999), the Cornerstone pre-release program in Oregon (Field, 1985) and the Amity in-prison TC and aftercare program in California (Wexler, Melnick, Lowe, & Peters, 1999). In all these programs, participants are required to attend aftercare programs as part of their release conditions. Failure to do so can result in technical violations, return to a stricter form of supervision and even parole revocation and return to prison (Inciardi et al., 1997; Hiller et al., 1999).

Reentry Courts

Reentry Courts are a relatively new addition to the criminal justice arena. They were started as a result of a U.S. Department of Justice national initiative in 1999 (Travis, 2005; Hamilton, 2011). The purpose of the reentry court is to monitor the period immediately following release from prison, when the likelihood of recidivism and incarceration is very high. The reentry court model is designed to address the needs of the offenders during this time and to enable a smoother transition into their communities. In the implementation of their day to day operations reentry courts adopted successful modules of the drug court model, thus combining judicial oversight with court-mandated treatment, case planning and management, and drug testing, and graduated sanctions to achieve changes in offender behavior (Farole, 2003; Hamilton, 2011).

Originally, the Department of Justice's Reentry Court Initiative (RCI) piloted nine reentry court sites across the nation. The piloting sites were intended to examine how the reentry court proceedings would help offenders successfully reintegrate into their communities through a system of support services and offender accountability. The initiative identified six core elements of reentry courts: assessment of needs and planning of services, active oversight of offenders, management of support services, accountability to the community, graduated sanctions, and incentives and rewards for program successes. Evaluation of the pilot sites revealed that unlike drug courts, reentry courts serve a wide variety of offenders and have to attend to a wide array of needs (Farole, 2003; Hamilton, 2011; Vance, 2011).

While reentry courts vary on the day to day operations, they all integrate components of the drug court model and traditional parole supervision. Thus, a central component of reentry courts is the use of a dedicated judge. Borrowing from the drug court model, the judge is actively involved in the case management, planning, and continued supervision of the offender. While traditional parole uses closed-door proceedings, in the reentry court the judge openly discusses the program requirements, the sanctions and their purpose with the offender. The reasoning behind these procedures is that the offenders will respect the court's decisions more and be more likely to comply with them if their purpose is explained (Farole, 2003; Hamilton, 2011).

Furthermore, the judge is actively involved in the planning and monitoring of services for the client. Parole officers, service provider agencies, and the judge work collaboratively to establish a reentry plan and assess the progress of the parolee. Offenders are encouraged to complete programming and stay on track with the requirements of their reentry plan through the use of graduated sanctions and incentives and ceremonies. Thus, the recognition of accomplishments is another key element of reentry courts. Rewards are presented for the

completion of milestones, early release is utilized to encourage program compliance, and graduation ceremonies are used to mark successful completion of the program. Resembling drug court graduation ceremonies, reentry court graduation ceremonies are often attended by the offenders' family, friends, and significant others (Farole, 2003; Hamilton, 2011).

Today, there are at least 24 reentry courts operating nationwide (Farole, 2003; Hamilton, 2011). Reentry courts operate on the federal level and several states have implemented reentry courts in an attempt to aid ex-prisoners successfully reintegrate (Vance, 2011). Examples of reentry courts include the Harlem Parole Reentry Court based in East Harlem, New York and the Supervision to Aid Reentry (STAR) program in Pennsylvania. While both courts tend to populations of parolees immediately after their release from prison and utilize similar core concepts in processing their clients, they differ in some areas. Accordingly, the STAR program serves a population of federal parolees returning to Philadelphia, while the Harlem Court serves parolees coming from state prisons (Hamilton, 2011; Taylor, 2013).

The STAR program is voluntary; any individuals returning from federal prison under supervised release have the opportunity to participate in the program. Participants attend reentry court sessions (scheduled every two weeks) in addition to complying with the requirements of their regular supervision. The judge, together with the reentry workgroup and the offender, openly discusses the parolee's progress during court proceedings. Participants in the reentry court are offered access to an array of services, and the reentry workgroup ensures that services become available immediately to the clients. As an incentive to complete the program, participants can have their supervision sentence reduced by as many as 12 months if they complete 52 consecutive weeks in the program successfully (appear in court at every scheduled meeting, and comply to the terms of the supervision). Lastly, graduation or successful

completion takes place when the parolee completes 12 months of the STAR program (Taylor, 2013).

In contrast, participation in the Harlem Reentry Court is not voluntary. Participants eligible for the program are selected from two transitional confinement facilities (inmates are moved into these facilities two to four months prior to their release). Offenders with certain mental health diagnoses, sex offenders, and arsonists are not eligible for the program. Once selected to be part of the reentry court program, the reentry team identifies the needs of parolees, makes referrals to appropriate treatment services, and assists in locating suitable living arrangements. Upon released from the transitional confinement institutions, parolees are required to participate in the program which is comprised of two phases and lasts six months. Movement through the phases is contingent upon compliance with the requirements of the reentry plan. At the end of six months, a graduation ceremony is held for parolees who have completed the program (Hamilton, 2011).

Housing and Homelessness Programs

The issue of finding stable housing has traditionally been addressed through the use of halfway houses. Thus, ex-prisoners are released to halfway houses that provide a temporary residence, while they themselves look for a more permanent placement (Latessa & Allen, 1982; Petersilia, 2003). However, the increasing costs associated with the high rate of parolee return to prison, have motivated government agencies to look into alternative programs that address the problem of housing and homelessness of returning ex-prisoners (Fontaine, Gilchrist-Scott, Roman, Taxy, & Roman, 2012).

Housing programs for ex-offenders are modeled after programs that were initially designed to assist individuals with chronic histories of homelessness and other disabilities in

non-correctional populations. Because research supports the effectiveness of such programs, correctional officials have developed similar programs that specifically target offender populations as they make their journey from prison to the community. The goal of these programs is to reduce recidivism, reduce homelessness, and ultimately reduce the costs that are associated with the use of health services or recidivism (Fontaine et al., 2012).

For instance, the Returning Home – Ohio (RHO) pilot program was implemented between 2006 and 2007 in 13 correctional institutions across the state of Ohio. The program was the result of the collaboration of multiple agencies, including the Ohio Department of Rehabilitation and Correction (ODRC) and the Corporation for Supportive Housing (CHS). The program provided housing services for disabled prisoners who were homeless at the time of their arrest and at risk of homelessness upon release. For the purposes of RHO, disability was defined to include a variety of developmental problems, behavioral health problems, and severe addiction. Offenders that qualified received reentry planning services while they were incarcerated, and were provided with housing and supportive services when they were released. RHO had funding for 84 housing units across participating providers in five cities (Fontaine et al., 2012).

A similar reentry housing program is the FUSE (Frequent User Service Enhancement) program that has been implemented in several cities including New York, Chicago, and the District of Columbia (Fontaine, Gilchrist-Scott, & Horvath, 2011; Roman, Fontaine, Fallon, Anderson, & Rearer, 2012). The program is a collaboration of multiple agencies and is designed to reduce recidivism, reduce homelessness/decrease homeless shelter use, and reduce the costs associated with multiple services across criminal justice and health service agencies. FUSE is designed to help offenders exiting city jails who have severe mental health problems and a

history of chronic homelessness and chronic homeless shelter use. Offenders who qualify for the program receive housing vouchers in low – income housing units. In addition, a community-based provider offers long term support services for the participants (Fontaine et al., 2011; Roman et al., 2012).

Violent Offender Programs

The Serious and Violent Offender Reentry Initiative was implemented in 2003 to specifically target high risk offenders reentering communities. At the time, the majority of rehabilitative programs were designed to address only one domain of need for offenders. However, research studies that were published at that point on the characteristics of offenders returning from prisons revealed that ex-prisoners coming back to the community were deficient in multiple areas. The rationale behind the development of the SVORI initiative was to encourage the development of programs that addressed multiple need areas of offenders, and improved reintegration of ex-prisoners across a range of outcomes. Through funding from the initiative, 69 agencies received funding resulting in 89 programs. SVORI programs had to satisfy a few criteria to qualify for funding (Lattimore & Visher, 2009). These criteria were:

Programs were to improve criminal justice, employment, education, health (including substance use and mental health), and housing outcomes.

Programs were to include collaborative partnerships between correctional agencies, supervision agencies, other state and local agencies, and community and faith-based organizations.

Program participants were to be serious or violent offenders.

Program participants were to be 35 years of age or younger.

Programs were to encompass three stages of reentry—in prison, post-release on supervision, and post-supervision.

Needs and risk assessments were to guide the provision of services and programs to participants (p.41).

While the SVORI programs were required to have similar goals, they differed vastly in the approaches they chose for the assessment and treatment of offenders and the implementation of their programs. Accordingly, SVORI programs differed in the type of services that they

offered, the needs they addressed, and the population they served (male, female, or juvenile). Offenders could participate in a single program or receive multiple services. In addition, some programs delivered services in one location to offenders who would be released to one jurisdiction, whereas other programs encompassed the services of multiple agencies and served offenders that would be released to multiple jurisdictions (Latimore & Visher, 2010).

As mentioned previously in this paper, the Second Chance Act also funded a multitude of programs, and a few of those were targeted toward high risk offenders. One of these programs was the Boston Reentry Initiative (BRI), which aimed to support high risk offenders leaving the Suffolk County House of Correction in Boston (the county jail) and reentering their communities. The program was started in 2001 and was a multi-agency collaboration between the Boston Police Department, the Suffolk County Sheriff's Department and a multitude of service providers and faith-based organizations (Braga, Piehl, & Hureau, 2009).

The BRI was designed to target high risk offenders from 18 to 32 who had previous incidents of violence and gang affiliations. Participants attended meetings with representatives of all the agencies involved in the initiative process before being released from jail. They were told of the consequences they would encounter if they did not abide by their reentry plans, while at the same time being offered a range of services. They were assigned caseworkers from the jail staff, faith based mentors from the community, and were enrolled in education, substance abuse and other programs based on their needs. The services were designed to provide a comprehensive support system for the offenders as they left the institutions and entered their communities, in an attempt to prevent the involvement of participants in new criminal acts, while facilitating their transition (Braga et al., 2009).

Programs for Female Offenders

While many correctional programs are developed to serve both male and female offenders, some researchers argue that women offenders tend to have needs that are different from male offenders, and require programming that is tailored specifically for them (Koons, Burrow, Morash, & Bynum, 1997). Therefore, some correctional agencies have developed gender-specific programs that serve only female offender populations. Similar to programs for male offenders, programs that target women offenders focus on substance abuse problems, housing issues, parenting, and child care needs of female offenders (Robbins et al., 2009).

The CREST work release program that was described earlier in this paper is a work release program that serves both male and female offenders. The program is a therapeutic community that participants begin in prison and conclude in the community in a halfway house. While the program was originally designed for males, it eventually enrolled female offenders. After several years, the program expanded to include more female staff and more beds for female offenders. As a result, the program changed to include the needs of the mothers participating in the program and their children. Thus, after the orientation period, children are allowed to visit their parents at CREST, and parents can visit their children during their furloughs. During women's groups parenting issues are discussed often (Robbins et al., 2009).

However, because males and females live in the same quarters and even attend some of the groups together, observers have noted a problematic, sexually charged environment. While sexual contacts are strictly prohibited by the rules of the program, observers have noted that some participants have difficulty maintaining clear boundaries with the opposite sex. Furthermore, many participants have histories of dysfunctional and sometimes abusive relationships that are materialized in the current relationships. Interactions between participants of opposite sexes are often the topic of group discussions (Robbins et al., 2009).

Therefore, many correctional agencies have developed gender-specific programs for female offenders. One program that focuses on female offenders is the Forever Free Substance Abuse program at the California Institution for Women. Started in 1991, the program is designed to reduce the incidence of drug use among incarcerated women who have a substance abuse problem, and are nearing their release date. The treatment starts while women are still imprisoned; participants who volunteer to be part of it are scheduled to be released within six months. Participants of the program complete an intensive four-month treatment in prison including substance abuse counseling, educational seminars, 12-step programs, and parole planning. They are also subjected to regular drug screens and are expected to maintain full-time, institutional employment (Prendergast, Wellisch, & Wong, 1996).

After graduating from the Forever Free program and being discharged on parole, participants may volunteer to complete a six month residential program in the community. Those who volunteer can enter one of four Forever Free community-based residential programs that house typically from two to 12 graduates, depending on availability. While differences exist among the different sites, all Forever Free facilities offer individual and group counseling. In addition, some facilities offer family counseling services, vocational training, and recreational or social activities (Prendergast et al., 1996).

A similar program was developed through collaboration between the New Jersey Department of Corrections and the Community Education Centers, a private correctional organization in New Jersey. In this instance, participation in the program is not voluntary, and women are referred to the Bo Robinson Assessment and Treatment Center from Department of Corrections' staff. The community-based program houses approximately 80 offenders who are assessed and treated for a period of 60 to 90 days, before being released to the community. The

center offers treatment that targets parent-child unification issues, housing, employment, substance abuse, domestic violence, mental health issues, and physical health needs. Treatment is comprised of eclectic treatment modules including cognitive behavioral therapy, didactic groups, process groups, and family therapy sessions (Heilbrun, DeMatteo, Fretz, Erickson, Gerardi, & Halper, 2008).

Other programs have focused on helping the reentry process of women offenders who have substance abuse and health problems exiting jails. One such program, the Recovery Management Checkup Model (RMC) assists women offenders who have substance abuse and physical health issues by increasing the contacts between correctional staff and the offenders after they have been released from jail into the community. The model was developed to include regular checkups at 30, 60, and 90 days post jail release for substance abuse women offenders who are at high risk of acquiring HIV. The model is based on the idea that regular checkups will prevent substance abuse relapse, and reduce the risk of engaging in risky behaviors (Scott & Dennis, 2012).

Counselors, called Linkage Managers, use Motivational Interviewing techniques to discuss participants' substance abuse, HIV risk behaviors, and illegal activity. They also schedule and accompany participants to treatment appointments, and in the case of residential treatment, have biweekly face-to-face contacts to discuss their progress. If the participant is not adhering with the requirements of the referred program, Linkage Managers collaborate with the program treatment staff to re-engage the participant in the program. In an effort to improve long-term outcomes, after the initial period of 90 days is completed, participants are contacted by the Linkage Managers on a quarterly basis (Scott & Dennis, 2012).

Research on Reentry Programs – Mixed Results

The growth in the availability and development of reentry programs and initiatives has increased the necessity for evaluating the effectiveness of such programs in helping ex-prisoners make the journey home successfully. In addition, the amount of money spent on corrections has quadrupled in the last two decades, with a significant proportion of these funds going towards reentry programs. Coupled with the high interest in the reentry issues by policy makers, practitioners, and scholars, and the shortages in state and federal budgets, Petersilia (2004) calls the issue of reentry program effectiveness “the \$64,000 question”. Amidst the multitude of correctional reentry programs and treatment modules targeting an equally large number of needs of ex-prisoners, which ones are the programs that deliver successful reentry? “Which programs should government agencies, non-profit organizations, and faith-based communities invest in (p.4)?”

Research on reentry programs has been pretty miscellaneous, some studies have focused on assessing the effectiveness of a standalone program (Hamilton, 2011; Wilson & Davis, 2006), while others have taken a more comprehensive approach, evaluating the effectiveness of a type of program statewide (Bouffard & Bergeron, 2006; Lowenkamp & Latessa, 2002), or looking at the efficacy of reentry programs nationwide (Lattimore et al., 2010; Lindquist, Lattimore, Barrick, & Visher, 2009; Seiter & Kadela, 2003). The results of these studies have also been diverse, with some studies demonstrating successful outcomes (Hamilton, 2011; Inciardi et al., 1997; Josi & Sechrest, 1999), to studies finding no program effects (Wilson & Davis, 2006), and other studies demonstrating a mix of positive and negative findings (Lattimore et al; 2010; Lindquist et al., 2009; Lowenkamp & Latessa, 2002; Seiter & Kadela, 2003).

Evaluations of Standalone Reentry Programs

One of the most well-known studies of reentry programs that produced less-than-successful outcomes was the evaluation of Project Greenlight (Wilson & Davis, 2006). Greenlight was a prerelease program that was based on evidence based practices; it offered cognitive behavioral therapy to offenders transitioning from prison to the community. However, an evaluation of the program found that Greenlight program participants had significantly higher recidivism levels than the control group participants at one year follow up. Evaluators cited numerous problems during program implementation including problems with facilitator training, large class sizes, inappropriately short time to deliver treatment (approximately eight weeks), and additional unnecessary mandated treatment (Wilson & Davis, 2006).

Other studies have found positive impacts of single-setting reentry programming. Thus, evaluations of the Key-CREST work-release and substance abuse therapeutic community program for males by Inciardi and colleagues (1997), found positive impacts of the program in both drug use and recidivism measures. Male participants that attended intensive vocational training and substance abuse programs while in prison and continuing into the community had lower substance use rates and lower recidivism rates at an 18 month follow-up period.

Similarly, positive impacts were also reported for female offenders that participated in the CREST program. Women who completed the work-release and substance abuse therapeutic community program with an aftercare component in the community, were significantly more likely to have remained drug-free and arrest-free at 18 months follow-up than the control group participants, or CREST participants who did not complete the program (Robbins et al., 2009). In addition, studies that have looked at other therapeutic communities that target substance abuse issues have found positive effects on recidivism. Thus, the Amity prison TC program with an aftercare evaluation found reductions in recidivism higher than 50% among program completers

at a 24 month follow-up period (Wexler, De Leon, Thomas, Kressel, & Petters, 1999). Lastly, the evaluation of the In-prison Therapeutic Community program with an aftercare component found significant reductions in substance abuse relapse and recidivism rates for program and aftercare graduates in the first six months following their release (Knight et al., 1997).

The last few years have also produced studies on the effectiveness of reentry courts, which serve offenders coming back to one jurisdiction. Studies of reentry courts have also shown mixed results. Thus, an evaluation of the District of Oregon Reentry Court program found better outcomes for the comparison group offenders than the offenders who participated in reentry court programming. The evaluators found that while offenders in the comparison group had less monitoring and supervision, and received less mental health and substance abuse services, they had fewer sanctions than the reentry court group, and had higher rates of employment than the reentry court participants (Close, Aubin, & Alltucker, 2008).

On the other hand, evaluation of the District of Massachusetts federal reentry court, Court Assisted Recovery Effort (C.A.R.E) found mixed results. The study found that while reentry court participants were less likely to recidivate and more likely to stay employed than the comparison group, these offenders were also more likely to have positive drug tests throughout the study period (Farrell & Wunderlich, 2009). Furthermore, an evaluation of the Harlem Reentry Parole Court in New York found that reentry court participants had lower reconviction rates than non-participants. However, these positive outcomes were overshadowed by the finding that participating in the reentry court significantly increased the chances of parole revocations. Parole revocation rates were significantly higher for reentry court participants in both the first and second year follow-up (Hamilton, 2011). Additionally, evaluation of the Western District of Michigan federal reentry court Accelerated Community Entry program (ACE) found that

program participants had lower recidivism rates than non-participants at a 12 month follow-up period (Lowenkamp & Bechtel, 2010).

Evaluations of Multi-Site/Multi-Agency Programs

Because reentry programs are so diverse in nature, some reentry program evaluations have attempted to assess the program impacts of programs that are funded under one initiative or grant but implemented in multiple sites (Jacobs, 2012; Lattimore, Barrick, Cowell, Dawes, Steffey, Tueller & Visher, 2012; Redcross et al., 2010), or by looking at a similar type of program across one state (Latessa, Lowenkamp & Bechtel, 2009; Lowenkamp & Latessa, 2002).

While halfway houses can vary in the number of programs that they offer, they are similar in their correctional philosophy. Lowenkamp and Latessa (2002) assessed the effectiveness of 38 halfway houses and 15 community-based correctional facilities across the state of Ohio. They tracked a total of 13, 221 offenders that were under the supervision of these facilities, and conducted a two year follow-up that measured recidivism of offenders in re-arrests and re-incarcerations. The evaluators found that programs across the state differed vastly in their effectiveness. Accordingly, while some programs reduced recidivism rates for over 30%, others had detrimental effects and in fact increased recidivism rates sometimes over 35%. More interestingly, results showed that the same programs can increase recidivism when serving inappropriate offenders (low-risk offenders), while successfully reducing recidivism for offenders who have been appropriately placed in treatment (high risk offenders) (Lowenkamp & Latessa, 2002).

Latessa, Lowenkamp, & Bechtel (2009) conducted a similar study to assess the effectiveness of halfway houses and community corrections centers across the state of Pennsylvania. They evaluated 54 facilities with a sample of 7,846 offenders. Analysis of the data

consistently found that program offenders fared worse than offenders in the comparison group throughout all measures of recidivism (re-arrest, re-incarceration, and technical violations). Similar to the Ohio halfway house study, evaluators found that correctional centers were mixing offenders with different risk levels, and concluded that placing low-risk offenders in treatment programs that target high-risk offenders can account for the poor performance of some correctional programs (Latessa et al., 2009).

Cindy Redcross and her colleagues (2010) evaluated the impacts of The Transitional Jobs Reentry Demonstration (TJRD), a program that provided vocational training and transitional employment for newly released offenders. As mentioned previously in this paper, the program was implemented in four sites, and while there were some differences between the sites, the core concepts of the program were stable throughout the different program locations. An initial evaluation of the program in all four sites tracked both employment and recidivism rates for the program participants during the first year after they entered the program. The study found that while offenders that participated in the program were initially more likely to work than comparison group offenders, the differences between the groups disappeared after the offenders left the TJRD transitional job.

Furthermore, similar proportions of both the treatment and the comparison group were employed at the end of the first year, about one third of each of the groups. Additionally, the TJRD program had no significant impacts on the participants' recidivism rates (Redcross et al., 2010). A follow up evaluation study examined the impacts of the program at the end of the second year of implementation and found very similar results to the first evaluation. While program participants were more likely to have transitional employment while in the program, their employment rates mirrored those of the comparison group after they left the program.

Similarly, the recidivism rates were comparable for program participants and offenders in the comparison group (Jacobs, 2012).

Comprehensive Studies of Reentry Programs

One of the largest scale evaluations of reentry programs conducted in the United States is the evaluation of the Serious and Violent Offender Reentry Initiative (description of SVORI programs is provided previously in this chapter). In 2003, the National Institute of Justice selected RTI International and the Urban Institute to evaluate the impacts of SVORI. Out of the 89 programs that were funded under the SVORI initiative, the impact evaluation study included 12 adult programs and four juvenile programs in 14 states. Because SVORI programs differed in the way they delivered services, the evaluation did not prioritize one particular type of reentry programming, but instead focused on the impact of services received by the SVORI participants. The final sample included 1,391 adult and juvenile males and adult females. Interviews with offenders were conducted at three, nine, and 15 months post-release. Furthermore, re-arrest, re-incarceration, and supervision data were provided for the evaluation through 2008 (Lattimore & Visser, 2009).

The impact evaluation of SVORI found no significant differences between recidivism rates of SVORI participants and non-participants. Adult male and female SVORI participants had similar rates of incarceration. However, the evaluation found a positive effect in other outcomes related to successful reintegration, such as housing, employment, substance abuse, and self-reported criminal behavior. In addition, male, juvenile SVORI participants were significantly more likely than their non-SVORI counterparts to be enrolled in school three months after their release from confinement. At 15 months after their release SVORI participants were also more likely to have a job with benefits. Similar to the adult offenders, the study found

no differences between the groups in recidivism outcomes. Lastly, SVORI juveniles were also not significantly different from non-SVORI participants in substance abuse, and physical or mental health outcomes (Lattimore & Visher, 2009).

The other comprehensive reentry programming study that has been completed to date is the review of reentry programs conducted by Seiter and Kadela (2003). They identified 32 reentry studies that were published between 1975 and 2001 and examined their effectiveness in reducing recidivism. They defined reentry programs as any correctional programs that focused on the transition from prison to the community. Therefore, they included any programs that started treatment in the prison setting and continued it in the community either through an aftercare treatment module, or by providing a link to a community program. Their definition included prerelease programs, work release programs, any specific reentry programs, and halfway houses. Furthermore, they measured program effectiveness and success by offenders' reduction in recidivism rates. In determining whether a program was successful, they utilized the Maryland Scale of Scientific Methods (MSSM) (Sherman, Gottfredson, MacKenzie, Eck, Reuter, & Bushway, 1998).

The scale rates programs from one (weakest) to five (strongest on overall internal validity and rigor. Studies that are rated as Level Five use random assignment, while Level One studies show a correlation between a program and an outcome measure. A program is considered “working” when there exist at least two Level Three evaluations that determined that the program was effective. Programs that do not work are have had at least two Level Three evaluations that have concluded that the program is ineffective, while for “promising” programs the level of certainty from available studies is too low to determine effectiveness (Seiter & Kadela, 2003).

Using the MSSM, Seiter and Kadela (2003) determined that only 19 studies out of the 32 they had identified met Level Three criteria (had a comparison or control group). They identified several program categories that showed success levels. These included vocational work programs, substance abuse rehabilitation programs, and halfway houses. Prerelease programs demonstrated some evidence of effectiveness, but the evaluation literature on these programs was methodologically weak. Furthermore, they found that educational programs increased educational achievement scores but did not reduce recidivism rates. Because 10 out of the 19 rigorous evaluation studies were studies that evaluated substance abuse programs, the authors observed that more evaluations of reentry programs were needed to determine the effectiveness of reentry programs in reducing offender recidivism.

Reentry Program Research

Issues with Definition

The Seiter and Kadela (2003) study highlighted the lack of rigorous evaluations in the area of reentry programming. However, the study was also criticized in being narrow in both the definition of what constitutes a reentry program, and the choice of outcomes in determining reentry program recidivism. Accordingly, Petersilia (2004) argues that while the definition provided by Seider and Kadela (2003) is correct and allows access to inspecting the effects of programs that have had studies of outcome evaluations, the definition excludes all the other reentry programs that have not been formally evaluated, or that do not specifically focus on the transition process.

According to Petersilia (2004), scholars and practitioners look at reentry in broader terms. Thus, Travis and Visher (2005) see reentry as the expected consequence of incarceration (as cited in Petersilia, 2004). For Travis (2005), reentry is a neutral concept, there are no positive or

negative connotations to it, reentry simply *is*. Reentry is a natural progression in corrections; it is the process through which the prisoners leave correctional institutions and return to society (also see Steen, Lacock, & McKinzey, 2012).

Altschuler & Armstrong (2002) also look at the reentry definition for evaluation purposes. They argue that reentry can be considered in broader terms, like “reintegration” and “continuity of care” or through narrower definitions, like “aftercare” and “relapse prevention” The last two terms are viewed as referring to the activities and programs that offenders attend when they return into communities. In contrast, terms like “reintegration” and “continuity of care” refer to broader dimensions and goals that the offender must accomplish by starting in the institutions and concluding in the community.

Lastly, Petersilia (2003) and Wilkinson (2001) view reentry as a philosophy that guides the activities and goals of correctional institutions and programs. Petersilia (2003) defines reentry as the sum of all the activities and programs conducted to prepare ex-prisoners’ return to the community together with how they spent time during confinement, their release process, and how they are supervised after their release. Wilkinson (2001) also looks at reentry in the same terms; he maintains that “reentry is a philosophy, not a program”. For prisoners, reentry begins when they are admitted into a prison, and extends beyond release. For a prisoner to be successfully reintegrated, Wilkinson (2001) calls for collaboration between family, correctional agencies, criminal justice organizations, and community establishments. Therefore, Petersilia (2003) argues that the first problem in reentry research is that of establishing a definition for what constitutes reentry, one that is not so narrow as to exclude a large number of programs, but one not so broad that makes it impossible to operationalize in terms of evaluation research.

Issues with Program Outcomes

Another criticism of the Seiter and Kadela (2003) study was directed towards the way they measured program effectiveness; by assessing the effects of the specific programs on participant recidivism. Petersilia (2004) maintains that traditionally effectiveness of programs in the U.S. has been evaluated by only using recidivism as the outcome measure. Yet, when it comes to correctional programming, especially reentry programming which is designed to target a multitude of needs, this way of assessing effectiveness is limited in scope.

Thus, reentry program research should also measure other indicators, like the effect that a program had on substance use frequency of an offender, whether an offender obtained employment and housing after release, whether a reentry program helped with the physical and/or mental conditions of an offender after release, and so on. Travis (2003) maintains that sometimes, while a program might not eliminate an offender's drug use completely, it can reduce it substantially. He contends that this reduction should be considered a success for the program. By using recidivism as the only outcome variable in evaluations, researchers are missing important impacts of correctional programs (as cited in Petersilia, 2004).

While Travis' (2003) and Petersilia (2004) claims are more than valid, designing evaluation studies that measure such changes in offenders, can constitute a challenge for reentry researchers. Problems can arise with the way variables like obtaining employment or housing, and even substance abuse are measured by studies that have included these measures in their outcomes. Some evaluations of housing and work reentry programs, and even drug rehabilitation programs measure these outcomes not by official records, but through offender self-report measures (Hiller et al., 1999), while others include official records (Redcross et al., 2010), and yet others include a combination of both (Inciardi et al., 1997). This can hinder efforts to synthesize the effects of correctional programming. Thus, while there is no shortage of

correctional programs that target vocational training and employment needs of ex-prisoners, in a meta-analysis of reentry employment programs, Visher, Winterfield and Goggeshall (2005) were only able to include eight studies. Lastly, many studies do not include measures that capture a decrease in engaging in risky behaviors (such as reduction in drug use), making it impossible at this time to conduct the evaluations that are proposed by Petersilia (2004) and Travis (2001).

Summary

This chapter outlined the history and research behind offender reentry programs. First, the chapter explored the history behind the development of offender treatment programs. Next, the shifts in correctional philosophy throughout the last 150 years were reviewed. The impacts of the changes in correctional paradigms were then discussed in the context of changes brought about to offender populations and their needs. The multitude of needs afflicting ex-prisoner populations was discussed in detail. Additionally, the development of the modern reentry programs and interventions was discussed further in the chapter. The chapter then discussed the research surrounding the different types of reentry programs and their effectiveness, noting the diverse findings of reentry research studies and the need for more evaluations in the reentry area. Lastly, issues related to reentry program definition and successful reintegration outcomes were examined.

This dissertation attempted to improve the knowledge in the area of reentry program effectiveness. The next chapter will answer two questions regarding reentry programs. The first, whether reentry programs are effective in reducing recidivism will be answered using a meta-analytic review of outcome evaluations. In addition, the dissertation will explore which types of reentry programs are the most effective in facilitating offender reintegration. Data collected through the review of outcome evaluations of reentry programs will be examined to determine

reentry program characteristics that are associated with program effectiveness. The specific procedures that will be used by this dissertation will be discussed in the next chapter.

CHAPTER 3

METHODS

Introduction

Due to the trends in offender reentry discussed in the previous chapters, nationwide focus has been directed toward the topic of reentry. During the past decade, numerous state and federal programs have been designed and implemented to address offender reentry issues. At the same time, much research is being conducted to assess the effects of such programs (Hamilton & Campbell, 2013; MacKenzie, 2013). The purpose of this dissertation is to assess the collective effects of reentry programs on the recidivism of offenders reentering their communities after incarceration. While many individual studies have examined the impact of individual reentry programs on offender recidivism, to date only two studies have synthesized the research on reentry programs (Lattimore & Visser, 2009; Seiter & Kadela, 2003). Furthermore, previous studies have been limited in determining the overall quantitative or statistical effect of reentry programming on recidivism.

Research Questions

This study seeks to add to the knowledge regarding reentry programs by focusing on two central empirical questions: 1) Do reentry programs reduce recidivism? 2) What are the characteristics of effective reentry programs? These questions will be answered quantitatively by using meta-analytic methods. In addition, the current study will attempt to advance knowledge on reentry programming by examining a larger number of studies than previous summaries, and by examining additional factors that might influence program outcomes such as type of programming, criminal history of program participants, and length of treatment.

The following sections will discuss the methodology to be used in this dissertation. First, the chapter will provide a description of the meta-analytical technique. Next, the advantages and disadvantages associated with using meta-analyses will be described. Third, a description of the eligibility criteria for the studies and the methods with which they will be collected will be provided. Fourth, the dependent, independent, and moderating variables will be presented. Lastly, the chapter will provide a description of the meta-analytical techniques, including computation of the fail-safe N statistic, the Q statistic, and the overall mean effect sizes.

Meta-Analysis

As new scientific studies are published constantly in every field, findings from different studies often contradict the results of previous ones and have varying outcomes – some of them show positive effects, other studies find negative effects, and yet other studies show no effects (Rosenthal & DiMatteo, 2001). In an effort to make sense of the research on a particular topic and to advance the knowledge of a field for practical reasons, researchers have traditionally used two ways of summarizing the body of research: narrative reviews, and vote-counting or ballot-box reviews. However, both methods have flaws that can influence inferences made from the summaries (Hunt, 1997; Hunter & Schmidt, 1990; Rosenthal & DiMatteo, 2001).

A narrative review lists and summarizes the findings across the studies in a particular topic. The researcher usually describes the studies and their findings, and sometimes tries to group studies with similar outcomes. However, this method can be challenging because the interpretation of the findings from each study is subject to the reviewer's bias (Hunter & Schmidt, 1990; Rosenthal & DiMatteo, 2001). Furthermore, when the body of literature on a certain topic is too large, the researcher usually selects a subset of studies for the summary. This can be problematic for a few reasons. For starters, the review does not include all the studies

conducted on the topic any longer (Jonson, 2010). Furthermore, the researcher can be influenced by conscious and/or unconscious bias in the selection and description of studies to support his/her own understanding of the literature. Thus, conclusions deducted from this type of synthesis can be biased (Rosenthal & DiMatteo, 2001). In addition, there are not set standards on how to conduct the review of the studies, or which study should be included in the synthesis. This makes this type of synthesis difficult to replicate (Jonson, 2010).

On the other hand, the vote-counting or ballot-box technique separates studies conducted on a specific topic according to their findings and outcomes: those who show positive effects, those who show no effects on the outcome, and those who show negative effects (Hunter & Schmidt, 1990). The researcher adds up the findings in each category, and the category that has the largest number of studies is identified as the overall best estimate of the effects of the studies on the determined outcome. However, this method has had three major criticisms (Hunt, 1997; Hunter & Schmidt, 1990).

To start, the vote-counting method does not take into account the differences between studies. While typically more confidence is placed upon findings of studies with larger samples, every study is given the same weight when being summarized through the vote-counting technique. Thus, Hunt (1997) maintains that in the vote-counting method, a study with a sample of 2000 cases counts as much as a study with a sample of 20 cases when discussing the results. Furthermore, the vote-counting method is not statistically powerful. Because vote-counting relies on the statistical significance of results, studies that have small samples can disappear during the tallying up of the results, showing as having no effect. The overview then, sees only the effects of the few studies with large samples, concluding that a certain treatment or program has no effect on the outcome, when in fact it does (Hunt, 1997). Lastly, the vote-counting method does

not measure the magnitude of the effect. If the studies summarized have large samples, then the synthesis of the studies will attribute a positive effect of the treatment or the program on the outcomes. Yet, the technique does not calculate how large the effect is; the effect of the treatment can be, in fact, trivial (Hunt, 1997).

Meta-analysis provides an alternative to both these methods. Although the first meta-analysis was conducted as early as 1904 by Karl Pearson while doing research on smallpox, the method did not gain popularity until the last decades of the 20th century (Hunt, 1997; Rosenthal & DiMatteo, 2001). During the mid-1970s, the technique became popular in the fields of medicine, biomedicine, and behavioral sciences because of the need that arose in these sciences to synthesize the large amount of studies generated. During this time, focus was diverted to seeing the “landscape” of the distribution of research results instead of concentrating on individual study results (as cited in Rosenthal & DiMatteo, 2001).

The term meta-analysis was introduced by Gene Glass in 1976 in his presidential address to the American Educational Research Association. During his address, Glass argued that meta-analysis was not just a statistical technique, but a systematic way of examining a large body of research. Specifically, conducting a new meta-analysis involves five steps: 1) formulating the problem and deciding what questions are hoped to be answered, 2) collecting the data/studies, 3) evaluating the data and determining which studies are appropriate for inclusion, 4) synthesizing the data through statistical procedures, and 5) presenting the findings (Hunt, 1997; Rosenthal & DiMatteo, 2001). Similar to other ways of summarizing research, meta-analyses are seen as a way of combining and organizing research in a particular area, however, meta-analysis attempts to do this by “reconciling the differences among studies” (Hunt, 1997).

Advantages of Meta-Analysis

Meta-analysis has become an important method in summarizing research findings in the contemporary scientific community. There are a few advantages of the technique that make meta-analysis a more preferred method of synthesizing research. They will be described in the following sections.

Magnitude of the Effect. First, meta-analysis allows for the examination of the magnitude and direction of the effect as it is distributed across the studies included in the review. Traditionally, studies rely on statistical significance to determine the effect of a treatment/program; significance is considered a good thing, while non-significance is considered bad. However, many times statistical significance is dependent upon sample size. Thus, studies that find the same effects sizes in terms of meaningful magnitude can vary in their statistically significant level simply because of low sample sizes. By coding the magnitude and direction of each relationship, meta-analysis allows the inclusion of small significant effects and even non-statistically significant effects to contribute to the overall results picture (Hunt, 1997; Lipsey & Wilson, 2001; Rosenthal & DiMatteo, 2001).

Moderating Variables. Second, meta-analytic reviews allow for the examination of the relationship between any of the study characteristics that can influence the differences in effect sizes across the studies. Because characteristics of studies are coded in a quantitative manner in meta-analysis, relationships between study outcomes and specific study characteristics such as criminal history of subjects, and treatment setting, can be examined in a synthesized way and have more statistical power than if examining individual studies. Thus, the technique allows for formulation of hypotheses and theoretical explanations of the occurrence of certain results. This,

in turn, adds to the accumulation of knowledge on certain subjects, and to theory development (Hunt, 1997; Lipsey & Wilson, 2001; Rosenthal & DiMatteo, 2001).

Managing Large Amounts of Data. Third, meta-analysis provides a convenient way of organizing large amounts of data. In traditional study reviews, summarizing and interpreting the findings of each study can become an impossible task when the number of studies on the subject is large. In contrast, the meta-analytic coding procedures and the use of computer databases to store the data allow for the synthesis of hundreds of studies (Hunt, 1997; Lipsey & Wilson, 2001). Furthermore, the coding process allows the researcher to become very familiar with the data and the overall research in one subject. Whereas in narrative reviews the researchers can concentrate on the findings of studies, when coding information for a meta-analytic review the researcher needs to scrutinize every aspect of the studies to determine whether they can be included in the review, and examine thoroughly the findings of the studies to calculate the effect sizes. Rosenthal and DiMatteo (2001) argue that the process of conducting a meta-analysis forces the researcher to become very intimate with the research area, and see the “landscape” of this research through the examination of the similarities and differences among the methods used in various studies (see also Hunt, 1997).

Replication. Fourth, as mentioned previously, the procedures for selecting studies for a narrative or a vote-counting review are ambiguous and can be influenced by researcher bias, making them difficult to replicate. In contrast, procedures for the categorization and coding of studies in meta-analysis are usually made public in the publication of the meta-analysis. These procedures are usually described in the method section of the study, and are available for scrutiny and review from any other researchers. Generally, description of methods report the inclusion/exclusion criteria, the manner with which the studies were coded, and a list of the

studies included in the review. This allows other researchers to scrutinize the findings of the study, and more importantly, replicate the study (Lipsey & Wilson, 2001).

Policy Implications. Finally, meta-analytic reviews produce quantitative data that are very useful for pragmatic and policy practices. Through the results of meta-analysis, policy makers can review summaries of large bodies of research that otherwise they would not have accessibility to because of training or time constraints (Hunt, 1997). Furthermore, meta-analytic results are easy to understand, and policy makers are more likely to have confidence in the statistics and numbers produced by meta-analytic reviews than the inferences made from traditional narrative or ballot-box reviews (Jonson, 2010).

Disadvantages of Meta-Analysis

Although the meta-analytic technique has several advantages over traditional summaries, and has been widely embraced by researchers in various disciplines, it has also drawn several criticisms. The following sections will delineate the criticism of meta-analysis and methods to correct for the problems.

Publication Bias. The first criticism of meta-analysis refers to the bias that exists in the publication practices of research studies. Journals are more likely to publish studies that find statistically significant results, and more often than not, studies that fail to reject the null hypothesis are passed over for studies that produced significant results. This phenomenon was referred to as the “file drawer” problem by Rosenthal (1979), alluding to the fact that many times these studies are lost and forgotten in file drawers. Failing to publish null results can be problematic for meta-analytic purposes, because if only statistically significant results are published and consequently included in the meta-analysis, results from the study can misrepresent the true situation. Therefore, research can appear to support effects that are, in fact,

much weaker or that do not exist (Lipsey & Wilson, 2001; Rosenthal, 1979; 1984). In examining this problem, Rosenthal (1984) found that unpublished studies tended to have smaller effect sizes than published sources, while Hunter and Schmidt (1990) found no differences in effect sizes between published and unpublished studies (as cited in Shaffer, 2006).

Nevertheless, there are methods of addressing the publication bias issues. One way is to conduct a thorough research for both published and unpublished studies. Researchers can search the websites of dissertation thesis, governmental reports, and even contact researchers that are known to do research on a specific subject (Jonson, 2010; Lipsey & Wilson, 2001). Furthermore, some universities have established journals for the single purpose of publishing studies that show no effects or fail to reject the null hypothesis. An example is the Journal of Negative Results in Biomedicine, which is a peer reviewed journal published by Harvard University dedicated to publishing negative findings from the field of biomedicine (Maxfield & Babbie, 2012). Other researchers urge for the creation of research registries that keep track of studies whose results are not published (Scargle, 2000). The U.S. National Institute of Health has created a site, where certain clinical trials are required to register (see also www.clinicaltrials.gov).

Another method of dealing with the file drawer problem is by statistically testing for the bias. Rosenthal (1979) proposed a way that tests the magnitude of the file drawer problem associated with a study. This method is known as the fail-safe file drawer (FSFD) analysis, or the fail-safe N statistic. The statistic calculates the number of studies with null effects that are missing from the meta-analysis and would change the findings of the meta-analysis to approach zero or no effect (statistically insignificant). When the number of studies needed (the N statistic) is high then the researcher can conclude that the study is very unlikely to be affected by publication bias (meaning it is unlikely that there exists such a large amount of unpublished

studies that show no effects) and that the effect size is not biased (Hunter & Schmidt, 1990; Lipsey & Wilson, 2001).

Mixing Apples and Oranges. A common criticism of meta-analysis, that is usually known as the “apples and oranges” argument is that the technique summarizes findings from studies that vary largely in the operationalization and measurement of the dependent and independent variables. Critics argue that meta-analyses ignore these differences and combine the studies as if there exist no methodological difference between them. Given the methodological differences among the studies, critics argue that the conclusions inferred by meta-analyses are meaningless (Hunt, 1997; Lipsey & Wilson, 2001; Rosenthal & DiMatteo, 2001).

However, Rosenthal and DiMatteo (2001) argue that while differences exist in the measurement methods of individuals studies, combining them is not necessarily a bad thing. More specifically, when studies are very similar methodologically, they are also limited in terms of generalizability. Meta-analysis can increase the generalizability of studies, and control for the methodological differences through the coding process by treating them as moderating variables. This process is not very different from the way researchers in primary studies control for variables such as race and age in determining whether they influence the study outcomes. Researchers can use the difference between studies to their advantage, and identify moderating variables that can be important in theory formulation and policy implications (Hunter & Schmidt, 1990; Shaffer, 2006). Furthermore, while some meta-analyses may make questionable judgments, their procedures are public and can be assessed by the next study (Rosenthal & DiMatteo, 2001).

Garbage In and Garbage Out. A related criticism refers to the methodological differences between the studies included in meta-analytic reviews. Critics argue that if meta-

analyses include studies with low quality methodology, then the errors of the primary studies will be unequivocally transferred to the meta-analytic process, producing misleading results. Furthermore, because meta-analyses mix good quality studies with bad ones, the errors are harder to be identified (Hunt, 1997; Lipsey & Wilson, 2001; Rosenthal & DiMatteo, 2001).

Some critics maintain that methodologically weak studies should be excluded from meta-analytic reviews. Thus, criteria should be created for inclusion of only methodologically strong studies in an effort to produce methodologically sound results, what is also called the “best-evidence synthesis” (Slavin, 1995). According to this view, meta-analyses should only include studies with experimental or quasi-experimental designs and exclude the ones with lower methodological quality. Yet, Lipsey & Wilson (2001) argue that adherence to this model can be problematic. For starters, defining superiority of methodological designs can be subject to debate among scholars. In addition, if this practice is followed, a vast amount of studies will be excluded resulting in the examination of a small number of studies.

Furthermore, Rosenthal (1991) has argued for the “quality weighing” of the studies in an effort to take into account the methodological quality of the studies. Following this technique, studies are rated on a scale that measures their methodological strength, and the variations can be reported with the results. Researchers can examine whether the differences in methodology influence study outcomes, and if bias is found, results can be adjusted statistically, or the studies that cause the problems can be removed from the estimation of the mean effect size (Shaffer, 2006; Lipsey & Wilson, 2001).

Multiple Effect Sizes. Another problematic area of meta-analysis is the use of multiple outcomes from the same study. Many studies utilize more than one outcome measure in examining the effects of their independent variable on the dependent variable (i.e., re-arrest,

reconviction, etc.). Glass, McGaw & Smith (1981) have chosen to treat each outcome as independent from others and conduct separate analyses for each of them. But this practice has been criticized by some researchers who note that analyzing the outcomes through this method can create errors because the outcomes are not independent of each other's influence (Rosenthal, 1991; Wolf, 1986). On the other hand, Rosenthal (1991) maintains that the outcomes should not be considered as independent for significant testing because they create errors and muddle up the results. However, he continues that the technique is acceptable for meta-analyses, since each study is weighed in proportion to the effect sizes it generates.

Nevertheless, Rosenthal (1991) proposes that each study of the meta-analysis should only contribute one effect size estimate. He proposes several techniques for obtaining a single research outcome from studies including calculating the mean level of significance and the mean effect size, or the median significance level and the median effect size. Furthermore, studies should be examined carefully by the researcher before making a determination. If the outcome is measured by only a few studies then its usage might not be necessary. Conversely, if the majority of studies report the specific outcomes, then the researcher must determine which of the aforementioned methods should be used in estimating effect sizes (Rosenthal, 1991; Shaffer, 2006).

Overall, like other methodological techniques, meta-analysis has both strengths and weaknesses. The technique has multiple shortcomings and, like with other methodological techniques, caution should be applied when interpreting the results it generates (Jonson, 2010). Nevertheless, meta-analysis is an important way of synthesizing research and fostering knowledge construction. It has proven useful in answering important questions in several research fields. It also employs techniques that guard against the methodological flaws of other

research summarizing methods (Cullen & Gendreau, 2000; Hunt, 1997). Therefore, this dissertation will employ meta-analytic techniques in assessing the effectiveness of reentry programs in reducing recidivism, and the specific programs characteristics that influence this relationship.

Current Study

Definition of a Reentry Program

This dissertation synthesized the research on the effectiveness of reentry programs. Therefore, the first step was to develop a definition of what constitutes a reentry program for the purposes of this review. While some scholars argue that the process of reentry begins when the offender enters prison (e. g., Wilkison, 2001), others have argued that it would be inaccurate to include institutional programs in the review of reentry programs (Seiter & Kadela, 2003). This dissertation adopted the two-part definition of reentry programs proposed by Seiter and Kadela (2003):

1. correctional programs that focus on the transition of the offender from prison to community (prerelease, work release, halfway houses, or specific reentry programs that provide services to recently released offenders and/or recently released parolees) and
2. programs that have initiated treatment (substance abuse, life skills, education, cognitive behavioral, sex/violent offender) in a prison setting and provide a component of the program in the community to deliver continuity of care.

Furthermore, the current definition differs slightly from the one proposed by Seiter and Kadela (2003). It was expanded to include studies conducted outside of the United States and Canada. Additionally, to account for the variety of service delivery for reentry offenders, the

second part of the Seiter and Kadela's (2003) definition was expanded to not require that the community component of a program be delivered by a single community agency only.

Seiter and Kadela (2003) consider this definition appropriate when evaluating the effectiveness of reentry programs for four reasons. First, because prisoner reentry programs are designed to facilitate the offenders' journey from prison to the community, only programs that are limited to the prison-community transition should be considered for the purposes of developing reentry policy. Second, many states and the federal government offer prerelease programs that are designed to prepare offender for the challenges that they will face while reentering the community. Some of them begin in the last six months of the offenders' sentence and provide a variety of treatment services; from community skills, to how to prepare for a job interview. Others constitute of a few hours of mandatory orientation by parole officers or mandatory rerelease supervision officers. It is important to assess which ones prepare the ex-offenders for a more effective transition.

Third, there also exist community reentry programs that deal with the needs of ex-prisoners once they have left the correctional institutions. Lastly, some reentry programs focus on dealing with a specific issue, such as substance abuse. Some of these programs begin in prison during the last months of the offenders' sentences and continue with a follow-up component in the community. These programs will also be included in the definition of reentry programs because they specifically address the transition of the offender from prison to the community (Seiter & Kadela, 2003). In addition, the definition in the current study will be expanded to allow for the inclusion of programs for ex-prisoners that are offered through a multi-agency collaboration.

Sample of Studies

Several sources and methods were used to gather relevant studies on reentry program effectiveness. First, a keyword search was conducted in multiple databases: Academic Search Complete, Criminal Justice Abstracts, Criminal Justice Periodical Index, Dissertation Abstracts Online, ERIC, National Criminal Justice Reference Service, PsychInfo, Social Sciences Citation Index, and Sociological Abstracts. The keywords: *Reentry Programs, Reentry Programming, Reentry Treatment, Reentry Initiative, Reentry Courts, Programs for Parolees, Treatment for Parolees, Ex-Prisoner Program/Treatment, Aftercare, and Relapse Prevention* were used to search these sources. Second, the bibliographies of four articles that describe reentry program research were examined to find additional studies (James, Stams, Ascher, De Roo, & Van Der Laan, 2013; Lattimore & Visher, 2009; Seiter & Kadela, 2003; Visher, Winterfield, & Goggenshall, 2005).

Third, websites for government agencies such as: the U.S. Department of Justice, National Institute of Justice, Office of Juvenile Justice and Delinquency Prevention, were searched for publications and reports on reentry programs. Fourth, the Bureau of Justice Assistance, the Office of Justice Programs and the U.S. Department of Justice have established the National Reentry Resource Center. The website for this Center includes important information about reentry statistics and facts, reentry program training, technical assistance, and reports of reentry program evaluations. The website includes the *What Works in Reentry Clearinghouse*, a database of reentry program evaluations rated according to their methodologies and effectiveness. In addition, the website provides a list of reentry program evaluations that were not included in the *Clearinghouse* database. Both the database, and the list of studies not included were searched for relevant studies that fit this dissertation's eligibility criteria.

Furthermore, the website provides a list of 189 reentry programs that exist throughout the United States. Each of these programs was examined to determine if it had been formally evaluated. Fourth, the websites for each state's Department of Correction and Office of Juvenile Corrections were visited and examined to discover evaluation reports. Fifth, the websites for the research agencies Rand, the Urban Institute, Vera Institute of Justice, and Abt Associates were examined to find unpublished studies. Sixth, the *ancestry method* was used to examine the bibliographies of each study that was collected for inclusion in the analysis. Finally, Google and Google Scholar searches were conducted with all the keywords discussed previously to find other published and unpublished studies.

Eligibility Criteria

To be included in the meta-analysis, the studies had to meet the following eligibility criteria:

1. The study must have evaluated a reentry program that fits the definition discussed previously in this chapter.
2. The study must have at least one measure of criminal behavior as an outcome measure.
3. The study must utilize an experimental or quasi-experimental design.
4. The study must provide enough information to calculate an effect size.
5. The study must have been published after 1980.
6. The study must include only adults in its sample.

The majority of reentry literature has concentrated on adult offenders. Not many of the reentry program evaluations are conducted on juvenile programs. Therefore, a decision was made to exclude juvenile offender studies from the current study sample. Additionally, all the studies were received and coded by September, 2013. Because this is the first meta-analytic synthesis of reentry programs, the inclusion criteria was intended to be relatively unrestrictive, to include a larger number of evaluations. Including a larger amount of studies allows for the coding of

multiple moderator variables in an effort to examine the impact of such variables on the study outcome (Jonson, 2010).

Overall, over 200 studies were identified through the search process described previously. A few of the studies evaluated the same program, but in different years and with different participants, or with different follow-up periods. For these studies each of the evaluations was counted as a separate study. Furthermore, some studies could include evaluations of multiple locations for the same program. If there were variations in program implementation between sites, and if there were separate evaluations provided for each program location, each site evaluation was coded as a separate study.

Dependent Variable

The dependent variable concerning both of the research questions asked by this dissertation was recidivism, or an official measure of criminal behavior. How recidivism was measured was coded with the following categories: parole violation, re-arrest, re-conviction, re-incarceration, or a combination of the above categories. Furthermore, the type of recidivism measure was coded in the following manner: general recidivism, violent recidivism, status violations or a combination of any of the categories. Additionally, the follow-up period for each outcome was recorded. When outcome measure was reported for multiple time periods, the longest follow-up period was utilized.

Moderating Variables

Moderating variables allow for the researcher to observe how the study outcome is influenced by other factors. This dissertation examined six categories of moderating variables. The categories and the variables included within each of them are discussed below.

Study/Publication Characteristics

A number of study characteristics were coded in this meta-analysis. Specifically, studies were coded on the type of publication (journal, book chapter, report, conference presentation, thesis/dissertation, online article, or unpublished data), the discipline of the senior author (criminal justice, economics, education, political science, psychiatry, psychology, social work, sociology, and other), decade of the publication, the affiliation of the authors (academic institution, government agency, program, and research firm/consultant). Furthermore, the location of the research study (Africa, Australasia, Europe, and North America) and the source of funding for the study (agency/organization, federal/state/local government, and unknown source) were also coded.

Sample Demographics

It is imperative to collect data on the various characteristics of the sample. The gender of the sample was coded (mainly males, mainly females, or mixed gender sample – considering 80% or more of the sample), as well as the percentage of the sample that is male and female was coded. Next, race of the sample (again when considering 80% or greater of the sample) was coded as white, black, Hispanic, Asian, Native American or mixed. In addition the percent white and percent black was coded. The mean age of the sample was also coded. Furthermore, the marital status of the offender sample was logged observing the 80% or greater rule (married, not married, mixed).

Since the link between risk of offenders and treatment effectiveness has been documented by several studies (Lowenkamp & Latessa, 2002; Latessa & Lowenkamp, 2005) the risk level of the sample was coded (author defined: low risk, moderate risk, high risk, and actuarial assessment: low risk, moderate risk, and high risk, and mixed risk). How risk was defined by the study was coded (risk assessment of the second or third generation, clinical determination,

criminal history only, and other). If risk was measured through an actuarial tool, the instrument name was documented. The time at which offenders' risk was assessed was coded (at screening, at intake, after intake, no formal process), and whether the risk was re-assessed was also documented (yes-clinical, yes-actuarial, no-no initial assessment, no-initial assessment but no reassessment). In addition, history of violent offense and sexual offense was recorded (yes, no, and mixed) together with the current offense type composition of the sample (violent, non-violent, and mixed). Moreover, the percentage of the mentally ill offenders was recorded – equal to or greater than 80% of the sample.

Treatment/Program Information

The different types of reentry programs and differences in program delivery were also coded. Thus, the type of control condition was coded (no treatment services, declined/rejected, wait list, minimal contact, treatment as usual, eligible but not referred, regular probation/parole, historical, mixed and other) and the control group design was coded (random design, statistical control, matching, other). The duration of treatment was recorded in weeks (ranging from one week to 13 or more weeks), and the frequency of the treatment contacts (ranging from less than weekly, to 1-2 times per week, to 3-4 times per week). In addition, the mean hours of contact per week (ranging from one hour to more 51 or more hours per week), and total mean hours of contact for the duration of the program were recorded (ranging from one hour to 1001 or more hours). Lastly, the mean hour of contacts were also recorded when dissecting the programs by phases (i.e., institutional, transitional, and community) ranging from 1-10 hours to more than 1000 hours.

To account for the diversity of needs that reentry programs target, treatment targets were coded through three variables (primary treatment target, secondary treatment target and tertiary

treatment target. In addition, each of these variables was coded to include a multitude of need areas for ex-prisoners (family/marital, employment, emotional/personal orientation, education, housing, antisocial attitudes, antisocial associated substance abuse, leisure activities, personal distress, mental health, medical condition, and other non-criminogenic needs).

Furthermore, characteristics of the program were coded starting with the type of the intervention (cognitive behavioral, psychodynamic, group milieu, family counseling, therapeutic community, vocational training, client centered therapy, education based, housing placement, housing assistance, health services, mental health treatment, provisional employment, substance abuse cognitive or client centered, relapse prevention, parenting classes, and other), the location of the treatment (prison, prison and community correctional facility, prison and community non-correctional, community correctional facility only, community non-correctional facility only, jail, and other), the setting of treatment for the community component of the programs (if the program had one) (residential, outpatient, and mixed), and whether the program offers an aftercare period were coded (1=yes, 0=no, 2= offered, but inconsistently).

Whether the treatment was provided by a criminal justice agency was also coded (yes, no, and mixed). The format of treatment was coded (individual treatment, group treatment, client and family treatment, mixed, case management, mixed format, and other). Additionally, because structured programs have been shown to be more effective in reducing recidivism, whether a manual is used in the program was coded (yes, no, missing), together with the name of the curriculum, if present. The age of the program at the time of evaluation was also noted (ranging from less than a year to more than three years). Whether the program was voluntary was also recorded (yes, no, mixed, other). Finally, it was recorded whether the program was offered in multiple sites/locations (yes or no), whether the program had a consistent model was coded (yes

or no) and whether the implementation of the program proceeded as intended was also recorded (yes, minor inconsistencies-no impact on outcomes, major inconsistencies, outcomes impacted). Lastly, the percentage of offenders that completed the program successfully was coded for the control and the treatment groups.

Follow-up Information

The length of the follow-up was captured in two ways; the first variable captured length of follow-up from discharge from the program (less than six months, 7 to 12 months, 13 to 24 months, 25 to 36 months, 37 months to five years, and more than five years). The second variable collapsed these categories into less than two years and more than two years.

Recidivism Information

The type of recidivism was captured by recording (parole/probation violation, re-arrest, re-conviction, re-incarceration, contact with court, mixed, and other). Furthermore, the type of outcome was coded as (general recidivism, violent recidivism, property offenses, drug offenses, sex offenses, and other). The source of recidivism data was coded as (self-report, official record, and other). Lastly, the percentage of offenders that recidivated and the mean recidivism rates were computed for the treatment and comparison groups for the studies that provided the information necessary to allow for the calculations.

Statistical Information

The statistical information to code each of the effect sizes was coded from each study (ANOVA, chi-square, descriptive statistic, correlation, t-test, F test, regression, phi statistic, and p value not specified). Furthermore, the number of subjects that were reported for the experimental and comparison groups was recorded together with the total number of subjects for

each study. This information was used to calculate an effect size for each study, and multiple effect sizes were calculated in studies that describe programs in different locations.

Methodological Quality Index

Because the methodological quality of studies included in the meta-analysis can impact the results of the meta-analysis (Hunter & Schmidt, 1990), this dissertation assessed the methodological quality of the studies included by coding several items. To start, each study was rated in terms of appropriate description of the sample (on age, gender, and race) through a dichotomous variable (0=no; 1=yes). The same dichotomous variable was also used for the coding of adequate description of methods, assessment of multiple outcomes, and whether the outcomes were reported on 80% or more of the sample of the study. This last variable measured the attrition of the study. Establishing the criterion at 80% of each group, means that no more than 20% of each group participants could drop out of the study.

Next, the statistical power of each study was measured by coding the sample size, the type of statistic, and the reported alpha. The statistical program GPOWER 3.1, created by Faul and Erdfelder (1992) was used to calculate the statistical power of each of the studies. For the studies that did not report alpha, the statistic was set to .05 (Shaffer, 2006). The calculator requires a desired effect size, which was set to .10 for this dissertation. This was done since previous meta-analyses of correctional programs have found an overall reduction in recidivism of .10 (Lipsey, 1992; Losel, 1995). More recently, McGuire (2013) completed a review of all the meta-analyses that have been conducted on the effectiveness of offender treatments. He argued that while there is tremendous variability between the individual study effect sizes, the overall effect size of correctional treatments hovers around the .10 mark. Therefore, after statistical analysis using the above mentioned program, studies that had 80% or greater power were coded

as having sufficient power, while those below 80% were coded as having insufficient statistical power.

Furthermore, characteristic of the study design were coded (random assignment, non-random/matched design, and non-random/other). The characteristics of the comparison group that can pollute the results were also noted (risk, sex, type, age, race, other) in determining whether differences existed between the comparison and treatment groups (differences exist on important characteristics; differences exist-unsure of impact; no differences exist on important factors). Whether the study employed a control group versus a comparison one was also recorded.

Lastly, an overall quality of study score was calculated using the sum for all the indicators. Descriptive statistics were used to determine the distribution of the summed scores and the average overall quality of study score. Study scores falling below the average were identified as having lower methodological quality, while studies falling around the average score or higher were identified as having a higher methodological quality. Furthermore, an effect size was calculated for both types of studies to determine the impact that methodological quality has on effect sizes (see Collaborative Outcome Data Committee, 2007; Hanson, Bourgon, Helmus & Hodgson, 2009).

Analysis

Inter-Rater Reliability

The author of this dissertation coded all of the studies obtained from the search using a coding guide. To increase reliability of the study, a second rater with considerable experience in meta-analysis and correctional program research, was first given a group of 16 studies that included studies incorporated in the final sample of coded studies and studies that were

determined as ineligible for coding from the author of this dissertation. The task of the second rater was to accurately select the studies included in the meta-analysis from reading the eligibility criteria for inclusion described previously in this same chapter (page 80). To assess inter-rater reliability agreement, the formula by Yeaton and Wartmon (1993) was utilized:

$$Agreement = \frac{\Sigma Agreements}{\Sigma Agreements + \Sigma Dissagreements}$$

The calculations resulted in an 87.5% agreement between the author of the dissertation and the second rater, meaning the second rater correctly identified 14 out of the 16 studies that were included in the meta-analysis sample. Landis and Koch (1977) refer to agreement rates that fall between .81 to 1.00 (or 81% to 100%) as almost perfect agreement, making the inter-rater reliability for this dissertation very robust (for the first stage).

Furthermore, the second rater coded a random subsample of the studies included in the meta-analysis sample (five studies or about 10% of the sample of studies) and the variables included in the coding guide¹. Publication information variables were deliberately excluded from the coding completed by the second rater, in an effort to not inflate the agreement score. The Yeaton and Wartmon (1993) formula was utilized again to assess the inter-rater agreement and calculations revealed an overall inter-rater reliability rate of 83%, revealing robust agreement rates between the two study coders.

Effect Size Estimates

The dependent variable or the effect size (ES) for this dissertation was calculated by using Pearson's *r* correlation coefficient. While effects sizes can be used by calculating other statistics, *d* calculated through the log-odds ratio, Pearson's *r* was chosen because it has a few

¹ Deborah Koetzle, Ph.D. has kindly agreed to code a sample of the studies.

advantages. For starters, the statistic is easy to calculate because formulas are available to transform statistics like chi-square, F, and t statistics to the r value. Furthermore, if researchers are converting d and r to one another in an effort of deciding which statistic to use to represent their findings, information is lost when converting r into d because r is continuous and d is dichotomous. The r allows for the analysis of trends across a number of categories, while d is limited to two categories. Additionally, the r statistic is easy to interpret in terms of practical importance (Rosenthal 1994; Rosenthal & DiMatteo, 2001).

The r statistic is not normally distributed; therefore each score must be converted to a $Z(r)$ score in order to approach a normal distribution. The conversion can be done using Fisher's r to z transformation calculations (Lipsey & Wilson, 2001). Furthermore, each effect size is weighted by sample size. This way, larger samples are given more emphasis in the analysis since they tend to produce more reliable statistics than small sample studies. Rosenthal and DiMatteo (2001) maintain that the weighing of each sample can be done by taking the product of $Z(r)$ and the inverse of its variance ($n-3$).

After weighing each of the effect sizes, the mean effect size was calculated by taking the sum of each of the weighted effect sizes $Z(r)$ and dividing that value by the sum of the inverse of the variance for each of the effect sizes. Furthermore, a 95% confidence interval was constructed around the mean effect size. Because confidence intervals reveal the degree to which estimates differ significantly from zero, if zero falls within the confidence interval, then the results are considered non-significant. However, if zero is not within the confidence interval, the results are considered significant at the .05 level (Lipsey & Wilson, 2001; Rosenthal & DiMatteo, 2001).

While both fixed and random models are presented for the overall effect size of reentry programs on recidivism, the mean effect sizes for the various moderator variables are only

presented for the random effect model. The fixed effects model is based on the assumption that there is only one population parameter behind all of the studies used to calculate the mean effect size. In other words, the fixed effects model assumes that the studies are homogenous, and that the variation across the studies is only due to sampling error, rather than due to real differences between studies in the underlying parameter. On the other hand, the random effects model allows for the possibility that population parameters differ from study to study (Hunter & Schmidt, 2000; Schmidt, 2010; Schmidt, Oh, & Hayes, 2009).

Furthermore, because the standard error of the mean effect size r is a function of the sampling error, the way confidence intervals are computed varies by the fixed or the random effects model. The fixed effects model takes into account the variance created only by simple sampling error, and does not take into account sampling error variance created by the differences between studies. As a result, confidence intervals for the fixed effects model tend to be too narrow and to overestimate the precision of effects sizes (Type I error). The random effects model takes into account both sources of sampling error variance when computing confidence intervals, which results in wider, but more accurate confidence intervals (Hunter & Schmidt, 2000; Schmidt, 2010; Schmidt, Oh, & Hayes, 2009).

Hunter and Schmidt (2000) argue that the majority of meta-analyses erroneously report the fixed effects model effect sizes, thus committing Type I error, which has important implications for policy and practical applications of the results. Therefore, the current dissertation reported the random effects model statistics for the various moderating variables included in the analysis.

The Q Statistic

The Q statistic was computed to determine the presence of outliers. The statistic is used as a test of homogeneity for the effect sizes. It is interpreted as a chi-square distribution. The value can suggest if there is any variation in the individual effect sizes, which in turn indicates that there is a significant difference between the studies. The Q statistic was calculated using the formula:

$$Q = \sum (w \times ES^2) - \frac{[\sum (w \times ES)]^2}{\sum w}$$

where w_i is equal to the individual weight for ES_i . If the Q value is greater than a critical value from the χ^2 distribution with $k - 1$ degrees of freedom, then the Q value is significant, and the distribution is considered a heterogeneous one. Outliers were identified and removed using two criteria: first, any values that were greater than two standard deviations from the mean were removed (Durlak & Lipsey, 1991) and second, estimates that were discontinuous in the distribution (meaning large gaps between subsequent values in the distribution) were also removed (Wilson & Lipsey, 2001). Statistics for the mean effect size, the weighted mean effect size and confidence intervals were re-calculated after removing the outlier values. Results were reported both with outlier values included and removed from the calculations.

Binomial Effect Size Display (BESD)

The Binomial Effects Size Display facilitates the interpretation of the mean effect size scores at face value. The BESD is shown to be the simple percentage difference in the outcome rates (in this case recidivism) between the treatment and comparison groups (Rosenthal & DiMatteo, 2001). BESD can be calculated from any effect size r by computing the treatment group success rate as 0.50 plus $r/2$ and the comparison group success rate as 0.50 minus $r/2$. The formula for the recidivism groups would be:

$$\text{Recidivism Rate} = 0.50 \pm \frac{r}{2}$$

For example, if an $r=-.20$ mean success for the treatment group, then in terms of recidivism would mean that the treatment group participants recidivated at $0.50+(-0.20)/2=0.40$ or 40%, while the comparison group participants recidivated at $0.50-(-0.20)/2=0.60$ or 60%. BESD examines the difference between the groups ($0.40 - 0.60= - 0.20$). This means that the treatment group participants recidivated at a rate of 0.20 or 20% less than the comparison group participants (Rosenthal & DiMatteo, 2001). The BESD will be calculated for each of the different reentry program types.

Fail-Safe N Estimation

One limitation of meta-analysis is the failure to include unpublished studies in the summary of studies. This can bias the results of meta-analysis, since studies that are published tend to show significant relationships between the variables being studied. This results in the cumulative effect calculated from studies to appear larger than it actually is. However, researchers have developed tests to measure the amount of bias that exists in the current study. Thus, the fail-safe N statistic determines the number of studies that need to be included in the current analysis in order to reduce the effect size to zero or a number close to zero (usually 0.001). Rosenthal (1979) developed such a test that was later modified by Orwin (1983):

$$N_{fs} = \frac{N_o(\tilde{d}_o - \tilde{d}_c)}{d_c - \tilde{d}_{fs}}$$

Where N_o is the number of studies, \tilde{d}_o is the mean effect size calculated from all the studies included in the meta-analysis, d_c is the desired effect size and \tilde{d}_{fs} is the mean effect size of the additional studies. The N_{fs} is the number of additional studies that are needed to obtain the desired effect size represented by d_c .

As it can be seen, Orwin's (1983) does not utilize r but Cohen's d . Therefore, Lipsey and Wilson (2001) adapted this formula to be used with other metrics for meta-analysis that do not report Cohen's d . Their formula is:

$$k_o = k \left[\frac{\overline{ES}_k}{\overline{ES}_c} - 1 \right]$$

where k_o is the number of studies needed to reduce the mean effect size for the meta-analysis to the \overline{ES}_c , or the alternative mean effect size, k is the number of studies that are used to calculate the weighted mean effect size, and \overline{ES}_k is the weighted mean effect size in the study. The use of this formula requires the researcher to select an alternative effect size. Hedges and Olkin (1985) maintain that the criterion should be set to a value that is considered negligible. While Cohen (1988) has suggested that an effect size of 0.20 can be considered small for the purposes of this formula, this dissertation will assume that the size of this effect size will not be considered small. For the purposes of this dissertation, considering the fact that meta-analysis have established the cumulative effect of correctional programs hovering around 0.10, so a 0.20 effect size is not regarded as a small one. The criterion effect size serves as a divisor, it cannot be set to zero, therefore the criterion was set to 0.01 (see also Shaffer, 2006).

Moderating Variables

In addition to assessing the overall effectiveness of reentry programs, several moderating variables were examined as they influence reentry program effectiveness. Specifically, the influence of various study characteristics, treatment characteristics, sample demographics, and methodological characteristics are explored. This was made possible by calculating mean effect sizes and confidence intervals for each of the moderating variable categories. If confidence intervals for a specific category of a moderating variable do not overlap with the confidence

intervals of another moderating variable category, it is assumed that there is a significant moderating effect.

Summary

This chapter has described the methods that were used for conducting a meta-analytic study to determine the effectiveness of reentry programs in reducing recidivism. While meta-analytic techniques have weaknesses, the current study has taken various steps to address some of the common problems found in meta-analytic studies. Thus, a thorough review of the research has ensured that both published and unpublished studies are included in the analysis.

Additionally, the fail-safe N statistic will be calculated to determine if the publication bias constitutes a problem for the current study. Next, variables describing study characteristics such as study design and methodological quality are coded in an attempt to address the “garbage in and garbage out” criticism of this technique.

Overall the current study attempts to accomplish a few goals. First, it seeks to be a comprehensive review of reentry programs using a meta-analytic technique. Second, it includes a greater number of studies than previous reentry program syntheses. Third, by examining the effects of moderator variables on the effect sizes, the study seeks to offer a more thorough examination of reentry programs and their impact on recidivism. Next, Chapter 4 will describe the findings of the current study, and Chapter 5 will outline the conclusions.

CHAPTER 4

RESULTS

Introduction

The previous chapters described the development and characteristics of reentry programs, the empirical evidence surrounding reentry programs to date, and the research methods used in the current study. This dissertation seeks to answer two research questions: 1) Do reentry programs reduce recidivism? 2) What are the characteristics of effective reentry programs? The current chapter presents the results of the analyses utilized to answer these questions in two sections. The first section presents the characteristics of the studies and the reentry programs included in this dissertation. The second section provides a description of the mean effect size.

Publication and Reentry Program Characteristics

As previously mentioned, an extensive search was conducted to identify completed outcome evaluations of reentry programs. This search resulted in the identification of 53 eligible studies reporting on 58 reentry programs. A number of studies were deemed ineligible during the coding process. Thus, studies were excluded from the group because it was discovered that they had no comparison group, were conducted on a non-offender sample, were conducted on a juvenile population, had no recidivism outcome, or did not report the necessary data to compute the effect size. The following section describes the general characteristics of these eligible studies and the reentry programs included in them.

Publication Characteristics

As can be seen in Table 3.1, about two thirds of the studies collected were journal articles (65.5%), with just over one third of them being technical reports. All of the studies collected

were geographically located in the United States (not shown in the table), with no studies from abroad meeting the criteria for inclusion into the meta-analysis.

The majority of the effect sizes for the current studies were calculated from studies published in the current decade (43.1%). More than a third of the studies were published in the previous decade (36.2%), followed by 17.2 studies published in the 1990s. Only two of the studies, or 3.4% of the sample, were published in the 1980s.

Concerning the affiliation of the authors who conducted the studies, more than half of the effect sizes (56.9%) were calculated from studies conducted by authors affiliated with academic institutions. Studies conducted by research firms made up 32.8% of the sample, authors affiliated with governmental agencies made up 8.6% of the sample of studies, and only 1.7% of the studies were conducted by the program being evaluated.

When examining the discipline of the study authors, about one third of them came from the field of Criminal Justice (32.8%). Studies conducted by political scientists made up 3.4% of the sample, as well as those conducted by authors in the field of social work (3.4%). Only one of the studies (1.7%) was conducted by authors affiliated with the Psychiatry/Medicine, 8.6% of the studies were conducted by Psychologists, 6.9% were conducted by Sociologists, and 5.2% were conducted by authors in Other disciplines. Finally, more than a third of the studies did not report the discipline of the authors (37.9%).

The majority of the studies included in the sample (56.9%) were funded by government entities, being local, state or federal. Standalone agencies or organizations funded 12.1% of the studies, one study or 1.7% of the sample was funded by an unknown source, and 8.6% of the studies were unfunded. Finally, 20.7% of the studies did not report this information.

Table 3.1. Descriptive Statistics: Publication Characteristics for Reentry Studies

Publication Characteristic	k	%
Publication Decade		
1980	2	3.4
1990	10	17.2
2000	21	36.2
2010	25	43.1
Publication Type		
Journal	38	65.5
Report	20	34.5
Author Affiliation		
Academic Institution	33	56.9
Government Agency	5	8.6
Program being evaluated	1	1.7
Research firm/consultant	19	32.8
Discipline of Senior Author		
Criminal Justice	19	32.8
Political Science	2	3.4
Psychology	5	8.6
Social Work	2	3.4
Psychiatry/Medicine	1	1.7
Sociology	4	6.9
Other	3	5.2
Missing	22	37.9
Source of Funding		
Agency/Organization	7	12.1
Federal/State/Local Government	33	56.9
Funded, unknown source	1	1.7
Not Funded	5	8.6
Missing	12	20.7

Sample Characteristics

As depicted in Table 3.2, multiple characteristics of the sample were coded. Specifically, the sex, race, marital status, mental health status, high school degree status, history of sex and violent offenses, and whether the current offense was violent were recorded for all the studies. The majority of the studies were conducted on male, offender populations, specifically 43.1% of the studies having an exclusively male population and another 43.1% having a mainly male population. There were 12.1% of the studies that were conducted on exclusively female offenders, and 1.7% of the studies employed a mixed population.

The majority of studies in the sample employed a mixed race population (72.4%). The studies that were done on populations that were mostly black made up 12.1% of the sample, while 3.4% of the sample had a mainly white, offender population. Lastly, 10.3% of the studies used in this dissertation did not report the race of their offender population.

Whether the majority of the offender population used in studies was mentally disordered or not was also coded. Thus, 5.2% of the studies were done on mentally disordered populations, 8.6% of the studies were done on populations that were not mentally disordered, and 12.1% of the studies were done on populations that had a mix of the two. However, the majority of the studies (74.1%) did not report on the mental health of their offender population.

The majority of studies did not report on the marital status of their offenders (69%), yet 10.3% of the studies had populations that were not married, while 20.7% of the studies had mixed marital status populations. None of the studies had a majority of married offenders.

Concerning the high school degree of the sample, 39.7% of the studies employed a population which was mixed in obtaining their high school degree or GED. One of the studies (1.7%) consisted of a majority of offenders who had not obtained their high school degree or

GED, and 10.3% of the studies were done on offender populations that had obtained their high school degree or GED. Yet, 48.3% of the studies did not report on this variable.

The studies were also coded on the offenders' criminal history as pertaining to violent and sex offenses. Specifically, 3.4% of studies had a majority of offenders with a violent offense history, and 3.4% of the studies had populations with no violent offenses in their criminal history. Nineteen percent of the studies employed a mix of offenders with violent and non-violent histories, and 74.1% of the studies did not report on offender past offenses. When it comes to sex offense criminal histories, 22.4% of the studies were conducted on populations that did not have sex offense histories, 3.4% of studies were done on a mix of offenders that did have a sex offense history and did not, and 72.4% of the studies did not report on past sex history offenses. For current violent offenses, 3.4% of the studies employed offenders that did not have a current violent offense charge, 32.8% employed a mixed population of violent and non-violent offenders, and 63.8% of the studies did not report whether the current offense was violent or not.

Finally, all studies include were of adult offenders, therefore the mean and standard deviation of the studies who reported the age of offenders were calculated. Only 77.6% of the studies reported the mean age of their populations. For these studies, the mean age of the population was 33.1(SD= 3.5).

Table 3.2. Descriptive Statistics: Sample Characteristics

Sample Characteristic	k	%
Sex of Sample		
Exclusively Males	25	43.1
Exclusively Female	7	12.1
Mainly Male (over 80%)	25	43.1
Mainly Female	-	-
Mixed	1	1.7
Race of Sample (over 80%)		
White	2	3.4
Black	7	12.1
Mixed	42	72.4
Missing	7	12.1
Mentally Disordered Offenders (over 80%)		
Yes	3	5.2
No	5	8.6
Mixed	7	12.1
Missing	43	74.1
Marital Status of Sample (over 80%)		
Married	-	-
Not Married	6	10.3
Mixed	12	20.7
Missing	40	69.0
HS Degree or GED (over 80%)		
Yes	6	10.3
No	1	1.7
Mixed	23	39.7
Missing	28	48.3
History of Violent offense (over 80%)		
Yes	2	3.4
No	2	3.4
Mixed	11	19.0
Missing	43	74.1
Mean Age for Sample M(SD)	45	33.1(3.5)

Table 3.2. Descriptive Statistics: Sample Characteristics cont.

Sample Characteristic	k	%
History of Sex Offense (over 80%)		
Yes	-	-
No	13	22.4
Mixed	2	3.4
Missing	43	74.1
Current Violent Offense (over 80%)		
Violent	-	-
Non-violent	2	3.4
Mixed	19	32.8
Missing	37	63.8

Risk of Sample

Because the risk of offenders is an important variable that can highly impact program outcomes, the risk-level of offender samples and risk-related variables were coded for the current study. As shown in Table 3.3, the way the risk was reported for the studies was coded by separating it into actuarial categories and categories of risk that were defined by the author(s) of the study. As such, 20.6% of the studies reported a risk level defined by the author(s) of the study, while 18.9% of them reported offender risk levels measured by actuarial assessment tools. As such, 3.4% of the studies contained low risk offenders, 13.8% had high risk offenders, and 22.4% had mixed risk offender populations. No studies reported moderate risk populations. However, the majority of studies, specifically 65.3% of them, did not report the risk level for the offenders.

Upon further examining the risk assessments, 10.3% of the studies reported having a high risk population as defined by the author(s), while another 10.3% reported having a mixed risk population as defined by their author(s). No low or moderate author defined risk offender samples were reported. When looking at risk measured by actuarial assessments, 3.4% of the studies were classified as low risk, another 3.4% were classified as high risk, and 12.1% were of mixed risk.

How risk was defined by the studies was also coded. The majority of the studies (62.1%) did not report on how they defined the risk level of their offender populations. However, 8.6% of the studies reported using a standardized risk assessment of the third generation, another 8.6% reported using a second generation risk assessment tool, 10.3% of the studies defined risk by using demographic information, 8.6% of the studies used criminal history only, and 1.7% of the studies used clinical assessment to measure offender risk.

Table 3.3. Descriptive Statistics: Risk Variables

Risk Variables	k	%
Risk Definition		
Author defined risk	12	20.6
Actuarial assessment risk	11	18.9
Missing	35	60.3
Risk Level (over 80%)		
Author defined: low risk	-	-
Author defined: moderate risk	-	-
Author defined: high risk	6	10.3
Author defined: mixed risk	6	10.3
Actuarial tool: low risk	2	3.4
Actuarial tool: moderate risk	-	-
Actuarial tool: high risk	2	3.4
Actuarial tool: mixed risk	7	12.1
Missing	35	60.3
Risk Collapsed		
Low risk	2	3.4
Moderate risk	-	-
High risk	8	13.8
Mixed risk	13	22.4
Missing	35	60.3
Definition of Risk		
Clinical	1	1.7
Criminal History Only	5	8.6
Author defined-demographic info	6	10.3
Standardized Risk Assessment 3 rd Generation	5	8.6
Electronic Monitoring/House 2 nd Generation	5	8.6
Missing	36	62.1

Table 3.3. Descriptive Statistics: Risk Variables cont.

Risk Variables	k	%
Risk Assessment Time		
At screening/referral	14	24.1
At intake (within 2 weeks)	2	3.4
After intake (after 2 weeks)	-	-
No formal process	5	8.6
Missing	37	63.8
Reassessment of Risk		
Yes, clinical	-	-
Yes, actuarial	1	1.7
No-only initial assessment	15	25.9
No-no initial assessment	6	10.3
Missing	36	62.1

The timing of risk assessment was also coded with 24.1% of the studies reporting that assessment was done during the screening process, 3.4% reporting that assessment was done at intake, 8.6% reporting that there was no formal process in screening offenders for risk, and the majority of the studies (63.8%) not reporting the time of the risk assessment. Furthermore, when examining if risk was reassessed, a little more than a quarter of the studies (25.9%) reported an initial assessment but no reassessment process for the offenders, 10.3% reported no initial assessment or reassessment of the offenders, and only 1.7% or only one study reported risk reassessment by an actuarial tool. The majority of the studies, 62.1% of them, did not report on this variable.

Table 3.4. Descriptive Statistics: Program Characteristics

Program Characteristics	k	%
Type of Programing		
Therapeutic Community	11	20.0
Substance Abuse	2	3.4
Transitional employment/assistance	10	17.2
Halfway Houses	4	6.9
Provisional Housing	3	5.2
Reentry Court	3	5.2
MICA services	2	3.4
Mixed/Combination services	16	27.6
Other	7	12.1
Phases/Components of Program		
Three phase program	9	15.5
Two phase program	14	24.1
One phase: prison/jail only	5	8.6
One phase: community residential	9	15.5
One phase: community outpatient	19	32.8
One phase: community mix	2	3.4
Location of Treatment		
Prison only	3	5.2
Jail only	2	3.4
Prison & CBCF	20	34.5
Prison & community		
Non-correctional facility	1	1.7
Community based correctional		
Facility only	21	36.2
Community based non-correctional		
Facility only	7	12.1
Other	4	6.9
CJ Provider of Treatment		
Yes	49	84.5
No	7	12.1
Missing	2	3.4

Table 3.4. Descriptive Statistics: Program Characteristics cont.

Program Characteristics	k	%
Setting of Treatment in Community		
Residential	23	39.6
Outpatient	24	41.4
Mixed	4	6.9
N/a	5	8.6
Missing	2	3.4
Aftercare Provided		
Yes	6	10.3
Provided but inconsistent	7	12.1
No	36	62.1
Missing	9	15.5
Time in Operation at Evaluation		
Less than a year	2	3.4
Less than two years	7	12.1
Less than three years	1	1.7
Three years or more	37	63.8
Missing	11	19.0
Duration of Treatment		
4-6 weeks	1	1.7
7-9 weeks	2	3.4
10-12 weeks	4	6.9
13 or more weeks	31	53.4
Missing	20	34.5
Frequency of Treatment Contact		
3-4 times per week	9	15.5
1-2 times per week	5	8.6
Less than weekly	3	5.2
Missing	41	70.7
Voluntary participation in program		
Yes	27	46.6
No	17	29.3
Mixed – Phase dependent	4	6.9
Missing	10	17.2

Table 3.4. Descriptive Statistics: Program Characteristics cont.

Program Characteristics	k	%
Primary Treatment Targets		
Family/Marital	3	5.2
Employment/Vocational	19	32.8
Emotional/Personal orientation	1	1.7
Antisocial attitudes/Cognitions	3	5.2
Substance abuse	17	29.3
Education	2	3.4
Housing/Homelessness	3	5.2
Mental health	2	3.4
Other	2	3.4
Missing	6	10.6
Primary Modality of Treatment		
Cognitive/Behavioral	3	5.2
Therapeutic community	12	20.7
Education based	4	6.9
Supervision only	3	5.2
Case management/service referral	16	27.6
Counseling	6	10.3
Other	4	6.9
Missing	10	17.2
Treatment Manual Used		
Yes	9	15.5
No	7	12.1
Missing	42	72.4
Implementation was as Intended		
Yes	9	15.5
Minor inconsistencies, No impact on outcomes	1	1.7
Major inconsistencies, Outcome impacted	21	36.2
Missing	27	46.5

Table 3.4. Descriptive Statistics: Program Characteristics cont.

Program Characteristics	k	%
Primary Format of Treatment		
Individual treatment	-	-
Group session	5	8.6
Client and family together	1	1.7
Case management	23	39.7
Mixed	25	43.1
Missing	4	6.9

Program Characteristics

Table 3.4 depicts program characteristics for the 58 studies included in this meta-analysis. The type of reentry program described in the study was coded separately for each study. Thus, over a quarter of the sample (27.6%) consisted of programs that offered a combination of services for the reentry offenders, while the second largest category of programs was therapeutic communities (20%). Transitional employment and employment assistance programs made up 17.2 of the sample of studies, while substance abuse programs and MICA programs for the dually diagnosed offenders consisted of 3.4% of the sample respectively. Furthermore, 5.2% of the sample consisted of reentry court studies, while another 5.2% were studies of provisional housing programs. Halfway houses studies made up 6.9% of the sample of studies, and the rest of the sample, 12.1%, offered other types of programs.

Because many reentry programs are designed to offer their services throughout the transition of the offender from prison into the community, the different number of phases contained by each program was coded for this study. The majority of reentry programs contain one phase (32.8%), their services are delivered in the community in outpatient form. About a quarter of the programs consisted of two phases (24.1%), and three phase programs made up 15.5% of the sample of studies. Moreover, 8.6% of the programs were delivered in one phase, as pre-release programs, either in the jail or in the prison. One phase residential post-release community programs made up 15.5% of the studies and 3.4% of the programs offered one phase, post-release treatment in the community through a combination of outpatient and residential programs.

The location of treatment was further broken down by the type of facilities that offered the program. As such, 34.5% of the sample was offered through programming that took place

first in prison and then in a community based residential facility. More than a third of the programs (36.2%) were offered in community based facilities only, while another 12.1% of the programs took place in non-correctional community facilities. Furthermore, 5.2% of the programs were offered in a prison location, 3.4% were offered in a jail setting, and one program (1.7%) was offered through a combination of services in a prison and outpatient services in the community. Lastly, 6.9% of the programs were offered in other types of locations. The majority of the providers for reentry services (84.5%) were criminal justice agencies/providers, while 12.1% of them were non-criminal justice agencies. The information was not provided for 3.4% of the studies.

The setting of the treatment for the programs that had a community component and those that were offered entirely in the community was also coded. As such, 39.6% of the programs offered residential services in the community, while 41.4% offered outpatient services. Another 6.9% of the programs offered a combination of residential and outpatient services in the community, while 8.6% of the studies were offered entirely in the institution; therefore information was not available about a community component. The information was not provided for 3.4% of the studies.

Provision of aftercare was also coded for the sample of studies. It should be noted that for the purposes of this study, the definition of aftercare included only services provided after the main phases of the program were completed. Therefore, the definition of aftercare is quite strict. The coding revealed that 62.1% of the programs did not offer an aftercare component after the main phase(s) of the program were completed, while only 10.3% offered aftercare services. Another 12.1% of the programs provided aftercares services, but did so inconsistently and not for all their offenders, while the information was not available for 15.5% of the sample of studies.

Information was also coded concerning the time in operation of the treatment programs, at the time of the study evaluation. Thus, 63.8% of the programs included in the sample had been in operation for at least three years at the time of the evaluation, 1.7% had been in operation for less than three years, 12.1% had been in operation for less than two years, 3.4% for less than a year, and 19% of the studies did not provide this information.

Moreover, the duration of treatment was coded for the studies of the sample. More than half of the programs (53.4%) lasted for a period of 13 or more weeks, 6.9% of the programs were between 10 to 12 weeks long, 3.4% of the programs lasted between seven and nine weeks, and 1.7% of the programs were between four to six weeks long. The information about program length was not available for over a third of the sample (34.5%).

Concerning frequency of treatment, the information was not provided for the majority of the sample (70.7%). However, for the programs that the information was available, 15.5% of the programs provided frequency of contact three to four times a week, 8.6% of the programs provided contacts one to two times a week, and 5.2% of the programs provided contacts with offenders on a less than weekly basis.

In addition, information was coded on the participation of offenders into the programs. As such, nearly half of the programs (46.6%) allowed voluntary participations of offenders, while 29.3% made treatment mandatory. Another 6.9% of the programs allowed participation to be voluntary depending on the phase of the program, usually the second and/or third phase, while 17.2% of the studies did not provide this information.

The primary treatment targets for each of the programs were also coded. Thus, about a third of the programs included in the meta-analysis (29.3%) targeted substance abuse problems of offenders, and another third of the programs (32.8%) targeted offender

employment/vocational needs. The rest of the programs targeted family/marital problems (5.2%), emotional orientation (1.7%), antisocial attitudes and cognitions (5.2%), education needs (3.4%), housing needs and homelessness (5.2%), mental health needs (3.4%), and other treatment target such as physical agility or monetary needs (3.4%). Lastly, 17.2% of the studies did not report on their treatment targets.

Furthermore, the primary modality of treatment was coded for all the studies included in the meta-analysis. As such, most prevalent treatment modality was case management/service referral (27.6%), followed by therapeutic communities, which made up 20.7% of the sample of studies. Cognitive/behavioral approaches were reported in 5.2% of the sample, while 6.9% of the treatment was education based, and 6.9% of the treatment involved counseling services.

Furthermore, supervision was the primary modality of treatment in 5.2% of the sample, and another 6.9% of the programs involved other treatment modalities. However, the information of treatment modality was not made available for 17.2% of the sample, or ten studies.

A treatment manual was used in 15.5% of the studies, and not used in 12.1% of the sample. This information however, was not made available for the majority of the sample (72.4%). Furthermore, concerning the implementation of the program, 15.5% of the studies reported that the program was implemented as intended, one program or 1.7% of the sample reported that implementation encountered some minor inconsistencies that would not likely impact the outcomes, while 36.2% of the studies reported that the implementation of the program had major inconsistencies. About half of the sample (46.5%) did not report on this variable.

Lastly, the primary format of treatment was also coded for the sample of studies. Data showed that none of the programs used individual treatment as the primary format of treatment, while a majority of the studies (43.1%) used a mixed approach to treatment of the offenders.

Furthermore 39.1% of the studies used case management as the primary mode of treatment, while only one study (1.7%) used treatment in which the client and the family were engaged in treatment together as their primary treatment format. Finally, 6.9% of the studies did not provide the information needed to code the variable.

Follow-up Information

The data for the follow-up information were also coded for the whole sample of studies. Table 3.5 presents the follow up information including the length of the follow-up period, the type of recidivism tracked, the type of outcome, and the source of data for the recidivism outcomes.

Concerning the length of the follow-up period, this study measured the follow up period after discharge from the reentry program. This was done in an effort to provide uniform findings, since the majority of the studies included calculated the follow-up period for their offenders using this method. Thus, 17.2% of the studies in the sample used a follow-up period of six months or less, and 22.4% of the studies used a follow-up period between seven to 12 months. The majority of studies in the sample (37.9%) employed a follow-up period between 13 to 24 months, and 13.8% of the studies used a follow-up period between 25 to 36 months. Only one study (1.7%) used a follow-up period between 37 months to five years, and no studies used a follow-up period of more than 5 years. Lastly, 6.9% of the sample did not report on their follow-up period. When collapsing the follow-up period, 55.2% of the studies used a follow-up period of less than two years, while 37.9% of the studies used a follow up period of two years of more.

Table 3.5. Descriptive Statistics: Follow-up Information

Follow-Up Characteristics	k	%
Length of Follow-Up		
Less than 6 months	10	17.2
7-12 month	13	22.4
13-24 months	22	37.9
25-36 months	8	13.8
37 months-5 years	1	1.7
More than 5 years	-	-
Missing	4	6.9
Follow-Up Period Collapsed		
Less than 2 years	32	55.2
2 or more years	22	37.9
Missing	4	6.9
Primary Type of Recidivism		
Parole/probation violation	1	1.7
Re-arrest	40	69.0
Re-conviction	4	6.9
Re-incarceration	10	17.2
Contact with court	-	-
Mixed	3	5.2
Source of Data		
Self-report	6	10.3
Official Record	51	87.9
Other	1	1.7

The type of recidivism that was reported by the study was also coded. The majority of the studies (69%) reported re-arrest rates for their offender samples, but 17.2% of the studies reported re-incarceration rates, 6.9% reported re-conviction rates, and only one study (1.7%) reported parole/probation violation rates for offenders. Also, 5.2% of the studies reported a mix measure of recidivism. It should be noted that in certain cases the re-incarceration rates included return to prison for a technical violation and, in some instances, the measure did not include them. Therefore, when a study reported both re-arrest and re-conviction measures of recidivism, preference was given to the re-arrest measure. Finally, the source of data was recorded for the sample, with 87.9% of studies using official records to report their recidivism measure, 10.3% of studies using self-report, and only one study (1.7%) using another source. It should also be noted that 100% of the sample of studies used general recidivism when reporting on their recidivism measure.

Comparison Group Characteristics

Several characteristics were coded for the comparison groups used by the studies in the sample. Table 3.6 presents descriptive statistics of these characteristics including the type of comparison group, the control group design, the initial group similarity, and comparison group attributes.

Concerning the type of comparison group, more than a third of the studies (36.2%) used treatment as usual for their comparison group participants. This meant that the offenders that were used in the comparison group, while not receiving the program that was being evaluated in the study, received the usual programming from the agency involved in the study. Furthermore, about a quarter of the studies (25.9%) used regular probation/parole for the comparison group participants, and 12.1% of the studies used offenders that were eligible for the treatment but not

referred to it to construct their comparison group. No treatment for the comparison group offenders was used in 8.6% of the studies, while 1.7% of the studies constructed their comparison groups by including offenders that declined to participate in the study. Another 3.4% of the studies used a historical comparison group, 3.4% of the studies used offenders that had minimal contact with the treatment modality, and 5.2% of the studies used offenders in the wait list for the program evaluated. Finally, one study (1.7%) used another way of selecting a control group.

With regard to the control group design, 34.5% of the studies used a random assignment design, 34.5% used matching to achieve group equivalence, and 3.4% of the studies used statistical controls. Furthermore, when coding for initial comparison and treatment group similarity, more than half of the studies (53.4%) had a nonrandomized design where there was strong evidence of initial equivalence between the groups, more than a quarter of them (27.6%) had a randomized or matching design, 12.1% had a nonrandomized design where there were acknowledged differences between groups, and 6.9% of the studies had a nonrandomized design with major differences between the groups.

Furthermore, when exploring the comparison groups that had known differences with the treatment groups, 75.9% of them had no differences on important factors, 19% had differences on important characteristics related to recidivism rates such as age, and risk, and 5.2% of them had differences between them, but their impact is uncertain.

Table 3.6. Descriptive Statistics: Comparison Groups

Comparison Group Characteristics	k	%
Type of Comparison Group		
No treatment	5	8.6
Declined/rejected	1	1.7
Wait list	3	5.2
Minimal contact	2	3.4
Treatment as usual	21	36.2
Eligible but not referred	7	12.1
Regular probation/parole	15	25.9
Historical	3	5.2
Other	1	1.7
Control Group Design		
Random assignment	20	34.5
Statistical control	2	3.4
Matching	20	34.5
Other	16	27.6
Initial Group Similarity		
Randomized or Matching Design	16	27.6
Nonrandomized Design with Strong Evidence of Initial Equivalence	31	53.4
Nonrandomized Design with Acknowledged Differences Between Groups	7	12.1
Nonrandomized Design with Major Differences Between Groups Related to Recidivism	4	6.9
Comparison Group Attributes		
Differences Exist on Important Characteristics	11	19.0
Differences Exist Unsure of Impacts Between Groups	3	5.2
No Differences on Important Factors	44	75.9

Reentry Program Effectiveness

This section presents the meta-analysis results on the overall effectiveness of reentry programs, as well as the mean effect sizes for the coded characteristics of reentry programs. The effectiveness of reentry programs, that is, their effect on reducing subsequent recidivism was explored in several ways. Table 3.7 presents the mean effects size of reentry programs across the 58 coded effect sizes (53 studies) for fixed effects and random effects models. As previously mentioned in Chapter 3, a fixed effect model only examines within-study variability, whereas the random effect model measures both the within-study variability and the between-study variability. Thus, the random effects model assumes that the studies included in the meta-analysis sample are a random sample of all the possible studies examining the effectiveness of reentry programs. Therefore, the random effects model is considered a more conservative estimate of the mean effect size, and the confidence intervals also tend to be wider in this model as compared to the fixed effects model (Lipsey & Wilson, 2001). For this reason, the subsequent effect sizes by the various measures such as treatment modality, risk level and so forth are presented in the random effect model statistics.

Overall effect sizes. In Table 3.7, *k* indicates the number of effect sizes included in the mean calculation, and the *N* indicates the number of participants included in the samples used to calculate those effect sizes. The mean effect size *r*, the weighted mean effect size *Z*⁺, and their respective 95 percent confidence intervals are presented for the random and fixed effect models. Finally, *Q* indicates the amount of variation in the model. A significant *Q* statistic shows that the sample of studies used in the calculations is heterogeneous, and that the influence of moderating variable should be further explored.

Table 3.7. Reentry Program Effectiveness

Model	k	N	r	Sd	CI	Z⁺	CI	Q
Fixed effects	58	289,125	.06**	.06	.05 to .07	.07	.06 to .07	137.04*
Random effects	58	289,125	.06**	.06	.03 to .09	.07	.06 to .07	137.04*

**p<.001; p<.05

Table 3.7 indicates that reentry programs significantly reduce recidivism by an overall effect size of .06, with confidence intervals of .03 to .09 for the random effect model. The models did not differ much from each other, and the confidence intervals for both models overlapped. Prior research indicates that correctional treatment has an overall effect of .10 on recidivism, in other words, it reduces recidivism by 10 percent (Andrews et al., 1990). The mean effect of reentry programs is somewhat lower than the average overall effect size of correctional programs. While study effect sizes ranged from -.172 to .624, the majority of the studies revealed that reentry programs reduced recidivism (72.4%). The 58 effect sizes resulted in a population of 289,125 offenders. The mean and the weighted mean were equal and their respective confidence intervals did not include 0, which corresponds to a significant effect on recidivism.

Another way of presenting this finding would be to compute Rosenthal's (1991) binomial effect size display (BESD), in order to make results easier to interpret. Rosenthal's (1991) formula assumes a 50% benchmark, therefore, applying it to the mean effect size reveals that the reentry program group would have a 47% recidivism rate while the comparison group would have a 53% recidivism rate.

Lastly, the Q statistic was statistically significant, which shows a need to explore the effects of moderators. However, it is also important to assess the effect of reentry programs after removing the outliers. Thus, outliers that were greater than two standard deviations from the mean were removed. This resulted in the removal of 16 effect sizes.

With Outliers Removed. Table 3.8 presents the overall mean effect sizes both with and without outliers for both models. After the removal of the outliers, both the mean effect size and the weighted mean effect size slightly increased to .07. The confidence intervals are narrower than the model with the outliers. For both the fixed and the random model they are .06 to .08.

Table 3.8. Reentry Program Effectiveness With and Without Outliers

Model	k	N	r	Sd	CI	Z⁺	CI	Q
Fixed model	58	289,125	.06**	.06	.05 to .07	.07	.06 to .07	137.03*
<i>With outliers removed</i>	42	239,919	.07**	.03	.06 to .08	.07	.06 to .07	34.18
Random model	58	289,125	.06**	.06	.03 to .09	.07	.06 to .07	137.03*
<i>With outliers removed</i>	42	271,376	.07**	.03	.06 to .08	.08	.07 to .08	34.18

**p<.001 *p<.05

Fail-Safe *N*

As stated in Chapter 3, one of the main criticisms of meta-analysis involves publication bias. Since the majority of the studies included in this meta-analysis are published in journals (65.5%), the fail safe *N* was calculated to determine the number of studies needed to reduce the effect size to .01. The Lipsey and Wilson (2001) formula revealed that an additional 290 studies with an effect size of 0 would be needed to reduce the effect size to .01. Thus, the findings reported in the current study can be viewed with much confidence. Additionally, the fail-safe *N* was calculated for the weighted mean effect sizes after the removal of the outliers. In order to reduce the mean effect size to .01, an additional 288 studies with an effect size of 0 would have to be included. The number of studies is not very different between the two models, since the removal of outliers did not result in drastic changes in the findings.

Moderating Variables

Program Phases. While the overall effect size is important, it is also important to examine the impact of moderating factors. Table 3.9 presents the mean effect sizes divided by the number of phases included in a reentry programs. Reentry programs are designed to help the transition of the offenders from the institution to the community. Therefore, many scholars maintain that reentry programs should start in the institution, include a transitional institution-community period, and continue to offer treatment when the offender is released in the community (Seiter & Kadela, 2003; Travis, 2005). Therefore, many reentry programs include three phases: an institutional one, a transitional one in which can be offered in a residential or outpatient setting, and a community phase, which can also be residential or outpatient. Furthermore, some reentry programs include an aftercare component after the offender completes all the three phases (Hiller et al., 1999; Martin et al, 1999).

Table 3.9. Reentry Program Effectiveness by Number of Program Phases

Characteristic	k	N	r	sd	CI	Z⁺	CI	Q
Three-Phase Program	9	6,592	.11*	.09	.04 to .18	.08	.06 to .10	11.31
Two-Phase Program	14	7,589	.12**	.06	.08 to .17	.12	.10 to .14	6.2
One-Phase Program	35	274,944	.03	.06	-.01 to .07	.07	.06 to .07	110.45*
<i>With outliers removed</i>	22	257,264	.06**	.03	.04 to .08	.08	.06 to .09	21.95

*P<.05 **p<.001

Thus, by examining Table 3.9, it can be seen that programs that provided multiple phases of treatment for their offenders, were significant in reducing recidivism. More specifically, three-phase programs had a mean effect size of .11 (CI = .04 to .08), while programs that offered two-phases had a mean effect size of .12 (CI = .08 to .17). It should be noted that while these confidence intervals overlap, the two-phase programs appear to be slightly more effective than three phase programs. In contrast, programs that delivered their treatment in one phase do not have a significant effect on recidivism .03 (CI = -.01 to .07). The confidence interval constructed around the mean includes zero, showing that the relationship is not significant. The Q statistic was not significant in the three-phase and two-phase program model, but it was significant for one phase programs, indicating that significant heterogeneity exist among the sampling distribution. However, this variation can be a function of the systematic differences between reentry programs, rather than sampling error. When the outliers were removed from the one phase program model calculations the effect size rose to .06, and became significant (CI = .04 to .08), since the confidence interval did not include zero (Cumming & Finch, 2005)

Treatment Location. The effect of reentry programs was also examined by examining the location where the treatment was delivered. Considering many reentry programs start delivering their services while the offenders are incarcerated and continue delivering treatment while the offender is released in the community, the mean effect sizes were calculated for programs that were delivered only in institutions, those delivered only in the community, those that included both an institutional and a community component, and other types of programs.

Table 3.10 presents the mean effect sizes by location of treatment. Programs that were delivered in a prison or jail location only (pre-release programs) were not found to have a significant effect on reducing recidivism. While the mean effect size for these programs in .12

(CI = -.09 to .33) the confidence intervals constructed around the mean effect size include zero, meaning the effect size is not statistically significant. However, when weighting the mean the zero is excluded from the confidence interval (CI = .08 to .16) making the findings significant. The $Q = 17.31$ was statistically significant indicating that there is significant heterogeneity in the sample.

The same was true for programs that were delivered solely in the community. The mean effect size was .02 (CI = -.02 to .06) but the confidence intervals included zero, indicating that the finding was not statistically significant. The results become significant when the mean is weighted by sample size and the confidence intervals do not include the zero between them anymore (CI = .02 to .02) The Q was also large for these types of programs 92.96 and it was statistically significant, indicating heterogeneity in the sampling distribution. Again, the variation can also be attributed to the systematic differences between the community programs. The model was calculated again by removing the outliers and the results revealed an increased effect size $r = .04$, which was statistically significant (CI = .02 to .07).

Furthermore, programs that were delivered in both the institution and the community had a significant effect on recidivism .11 (CI = .08 to .14). Computing Rosenthal's (1991) BESD statistic would indicate that assuming a 50% recidivism rate baseline, program participants have a 45.5% recidivism rate compared to the 54.5% recidivism rate of comparison group participants. This indicates that reentry programs that provide offender services that start in the institution and continue in the community have a positive effect in reducing recidivism.

Lastly, the fail-safe N was calculated for all three groups: prison/jail only needed an additional 55 studies to bring the effect size to zero, community only programs needed an additional 30 studies (60 studies for the model with outliers removed), and institutional and

community program effect size estimates needed an additional 230 studies for the mean effect size to become zero, again indicating the most robust results. This finding reinforces the contention that reentry should start while the offender is institutionalized and continue while he or she returns into the community.

Mode of Treatment in the Community. Table 3.11 presents the mean effect sizes by the format of treatment in the community for the reentry programs that included a community component. Reentry programs have a multitude of formats, with some of them delivering the community component in a residential setting and some using an outpatient treatment format. As seen in Table 3.11, the programs that had a residential treatment format in the community did not have a significant effect on recidivism .05 (CI = -.00 to .11). The same was true when the model was calculated again with outliers removed. The effect size remained the same .05, and it was not statistically significant, because the confidence interval included zero (CI = -.00 to .10). However, the statistic becomes significant when the mean effect size is weighted for both the calculations that included the outliers (CI = .04 to .06), and the calculations with outliers removed (CI = .03 to .07).

For the outpatient programs in the community, the effect size was statistically significant .06 (.02 to .09) indicating a reduction in recidivism. The Q statistic was not significant. Lastly, the programs that offered a mixed model of services (combination of outpatient and residential treatment) also demonstrated a positive effect on recidivism reduction .08. This reduction in recidivism was also significant (CI = .07 to .09). The fail safe N was calculated for the outpatient model and indicated that an additional 120 studies would be needed for the mean effect size to become zero. For the mixed mode of delivery in the community model the fail safe N was 28 studies.

Table 3.10. Reentry Program Effectiveness by Treatment Location

Characteristic	k	N	R	Sd	CI	Z⁺	CI	Q
Prison/Jail Only²	5	2,388	.12	.21	-.09 to .33	.08	.03 to .12	17.31**
Community Only	30	273,204	.02	.05	-.02 to .06	.07	.06 to .07	92.96**
<i>With outliers removed</i>	20	256,278	.04*	.03	.02 to .07	.05	.04 to .05	21.39
Inst. + Community	23	13,533	.11**	.08	.08 to .15	.10	.09 to .12	16.64

*P<.05 **p<.001

² The analysis without the outliers was not repeated for studies with k=10 or smaller.

Type of Program. Next, the effectiveness of reentry programs was examined by the type of program. Table 3.12 presents the mean effect sizes for the reentry programs as divided by the type of program model such as therapeutic community, substance abuse only programs, provisional employment programs, halfway houses, programs that provided provisional housing, reentry courts, programs with a dual purpose for Mentally Ill/Chemically Addicted offenders (MICA), programs that offered a combination of services, and other types of programs.

Thus, it appears that therapeutic community programs significantly reduce recidivism. The mean effect size for this group was .15 (CI = .08 to .22) and statistically significant. Calculating the BESD statistic for this effect size indicates that participants in the treatment program would have a recidivism rate of 42.5%, while participants in the comparison group would have a rate of recidivism of 57.5%, when considering a 50% baseline recidivism rate.

The programs that offered substance abuse treatment only were not found to significantly reduce recidivism .07 (CI = -.12 to .26). The presence of zero in the confidence interval indicates that the mean effect size is not significant. Furthermore, the programs that provided provisional employment services to reentry offenders were also not found to have a significant effect on recidivism .00 (CI = -.04 to .04). For both substance abuse and employment programs the effect sizes remained not significant even when weighting for sample size, respectively (CI = -.00 to .14) and (CI = -.02 to .02).

The halfway house programs included in the reentry sample were found to have a significant effect on recidivism, albeit in the wrong direction. The mean effect size was -.07 (CI = -.10 to -.03). Rosenthal's (1991) BESD best illustrates this by showing that the recidivism rate for the halfway house offenders would be 53.5%, while the comparison group offenders would have a lower recidivism rate of 46.5% with a baseline of 50%.

Table 3.11. Reentry Program Effectiveness by Mode of Delivery in the Community

Characteristic	K	N	R	Sd	CI	Z⁺	CI	Q
Residential	22	20,949	.05	.09	-.00 to .11	-.02	-.03 to -.01	43.33**
<i>With outliers removed</i>	13	11,385	.05	.08	-.00 to .10	.05	.03 to .07	16.32
Outpatient	24	21,788	.06*	.08	.02 to .09	.05	.04 to .06	31.06
Mixed Model	4	241,165	.08**	.01	.07 to .09	.08	.07 to .08	1.12

*P<.05 **p<.001

Next, programs that provided provisional housing services for offenders were also not found to have a significant effect on recidivism .02 (CI = -.04 to .08), and neither did the reentry court programs that were included in the sample .02 (CI = -.10 to .13). Not that zero is part of both of the confidence intervals constructed around the mean effect sizes for these two groups. However, the MICA programs were found to have a significant effect on recidivism rates .28 (CI = .01 to .53). Even though the confidence interval for this type of program is slightly wide, the BESD statistic indicates that the MICA program participants would have a 36% recidivism rate, while the comparison group participants would have a 64% recidivism rate, a finding also significant in magnitude. The fails safe N indicated that an additional 54 studies would be needed to reduce the mean effect size to zero.

Lastly, programs that offered a combination of services had a significant impact on recidivism .08 (CI = .04 to .13). The Q statistic was also large 25.20 and significant for this group, indicating a heterogeneity in the sampling distribution. However, as with previous observations on mix format treatments, the variation could also be as a result of significant systematic differences between these programs. The fail safe N statistic indicated that and additional 112 studies would be needed to reduce the mean effect size to zero.

The model was calculated again without outliers and the programs still had a significant effect .07 (CI = .04 to .10). The fail safe statistic for this group was 90. The same was true for programs in the other treatment type category, although these programs had a slightly bigger effect on recidivism than the mix treatment group .10 (CI = .05 to .16). The Q statistic was not significant for this group. The fail safe N for this group was 63 studies.

Program Modality. Table 3.13 examines the mean effects sizes of reentry programs as separated by their treatment modality. Thus, mean effect sizes, weighted mean effect sizes and

respective confidence intervals are presented for programs that use a therapeutic community approach, those that use a cognitive behavioral approach, education based programs, programs that mainly provide supervision, programs that provide only referral services/case management to offenders, programs that offer counseling services, and other types of programs.

The programs that had a significant effect on recidivism included therapeutic communities .17 (CI = .10 to .25), counseling service programs .16 (CI = .04 to .28), and other types of programs .13 (CI = .07 to .19). The fail safe N calculations revealed that an additional 216 studies would be needed for the therapeutic community program mean effect sizes to be reduced to zero, an additional 66 studies would be needed for counseling program group, and 48 studies would be needed for the other type of modality programs to reduce the mean effect size to zero.

In contrast to the previous research, cognitive behavioral programs did not have a significant effect on recidivism .01 (CI = -.12 to .13). Furthermore, education based programs .06 (CI = -.05 to .17), consistent with prior research supervision only programs .12 (CI = -.02 to .25), and case management/service referral programs .03 (CI = -.01 to .07) were also not found to have a significant effect on recidivism. The Q statistics were not significant for any of the groups, indicating that the groups had homogenous sampling distributions. However, with the exception of the therapeutic program category and the case management/service referral category of programs, the number of studies in each of the categories is considerably low, therefore the results should be interpreted with caution.

Table 3.12. Reentry Program Effectiveness by Type of Program

Characteristic	k	N	r	Sd	CI	Z⁺	CI	Q
TC	11	3,680	.15**	.09	.08 to .22	.15	.12 to .19	6.1
Substance Abuse	2	746	.07	.08	-.12 to .26	.10	-.03 to .17	.60
Employment	10	8,742	.00	.05	-.04 to .04	.00	-.02 to .02	5.86
Halfway House	4	15,083	-.07**	.03	-.10 to -.03	-.07	-.08 to -.05	2.44
Provisional Housing	3	3,709	.02	.04	-.04 to .08	.02	-.01 to .05	1.16
Reentry Court	3	1,206	.02	.05	-.10 to .13	.02	-.04 to .08	.56
MICA Program	2	234	.28*	.07	.01 to .53	.28	.15 to .41	.29
Mix of Treatment	16	248,272	.08*	.03	.04 to .13	.08	.07 to .08	25.20*
<i>With outliers removed</i>	15	248,127	.07**	.02	.04 to .10	.07	.06 to .07	15.26
Other	7	7,453	.10*	.06	.05 to .16	.08	.06 to .11	4.96

*P<.05 **p<.001

Table 3.13. Reentry Program Effectiveness by Program Modality

Characteristic	k	N	r	Sd	CI	Z⁺	CI	Q
TC	12	2,944	.17**	.09	.10 to .25	.19	.15 to .22	5.6
Cognitive behavioral	3	1,507	.01	.09	-.12 to .13	.00	-.05 to .05	2.92
Educational	4	3,120	.06	.08	-.05 to .17	.04	.01 to .08	2.04
Supervision only	3	1,028	.12	.05	-.02 to .25	.11	.05 to .17	.57
Case Management	16	250,461	.03	.03	-.01 to .07	.07	.07 to .08	21.5
Counseling	6	3,643	.16**	.13	.04 to .28	.12	.09 to .15	11.6
Other	4	3,968	.13**	.04	.07 to .19	.13	.10 to .16	1.4

*P<.05 **p<.001

Offender Risk. Offender risk was also examined as a moderating variable of the effectiveness of reentry programs. The results of the analysis are presented in Table 3.14. Mean and weighted mean effect sizes are presented for low, risk, high risk and mixed risk categories of offenders. Thus, there was no significant effect on recidivism .06 (CI = -.07 to .19) when looking at the low risk offender category - the category was collapsed to include both author defined and actuarial assessment studies.

The mean effect size was also not significant for the mixed risk category .02 (CI = -.06 to .01). The Q statistic was small and not significant for both of these categories. However, consistent with prior research (Lowenkamp & Latessa, 2005) the mean effect size was significant for the high risk offender category .07 (CI = .01 to .13). The Q statistic was not significant for this category. The fail safe was calculated for this category and it was 48, indicating confidence in the findings. Lastly, because of the large amount of missing data in this variable; there were no studies that reported offenders with moderate risk. The number of studies in each of the categories is also considerably low.

Table 3.14. Reentry Program Effectiveness by Offender Risk

Characteristic	k	N	r	Sd	CI	Z⁺	CI	Q
Low Risk	2	922	.06	.03	-.07 to .19	.06	-.01 to .12	.19
High Risk	8	4,245	.07*	.06	.01 to .13	.07	.04 to .10	3.82
Mixed Risk	13	24,158	-.02	.05	-.06 to .01	-.04	-.05 to .00	15.26

*P<.05 **p<.001

Length of Program. Mean effect sizes were also calculated by observing for differences in the length of the program. Table 3.15 presents the mean effect sizes, weighted mean effect sizes and their respective confidence intervals for two categories of program length; programs that were up to 12 weeks long, and programs that were 13 or more weeks long. A significant mean effect size was found for programs that were 13 weeks or longer in length .12 (CI = .08 to .15). Calculating Rosenthal's BESD statistic for these programs reveals that when assuming a 50% recidivism rate baseline, participants in programs that lasted 13 weeks or longer would have a 44% recidivism rate, while the comparison group participants would have a recidivism rate of 56%. The mean effect size was not significant for programs that lasted up to 12 weeks .00 (CI = -.04 to .04). Furthermore, the Q statistic was not significant for either of the groups.

Program Characteristics. Furthermore, mean effect sizes were also calculated for several other program characteristics, such as voluntary participation in the program, provision of treatment by criminal justice or non- criminal justice agencies, and availability of aftercare. Table 3.16 presents the results for all these moderator variables.

Concerning voluntary and non-voluntary participation, mean effect sizes are presented in three categories, voluntary participation, non-voluntary participation in the program, and the mixed category that include programs that made parts of the program mandatory for the offenders and other parts voluntary. Mean effect sizes were significant for all the three categories: voluntary participation .05 (CI = .01 to .09), non-voluntary participation, .07 (CI = .00 to .13) and mixed participation programs .14 (CI = .04 to .24). The mean effect size was higher for the mixed participation program; however, the samples size was considerably smaller than the other two categories.

Table 3.15. Reentry Program Effectiveness by Length of Program

Characteristic	k	N	r	sd	CI	Z⁺	CI	Q
12 weeks or less	7	9388	.00	.05	-.04 to .04	.00	-.02 to .02	4.68
13 or more weeks	31	16260	.12*	.08	.08 to .15	.11	.09 to .13	19.17

*P<.05 **p<.001

Table 3.16. Reentry Program Effectiveness by Program Characteristics

Characteristic	k	N	r	sd	CI	Z ⁺	CI	Q
<i>Participation</i>								
Voluntary	27	23,503	.05*	.08	.01 to .09	.05	.03 to .06	34.63
Non-Voluntary	17	7,514	.07*	.12	.00 to .13	.06	.04 to .09	24.14
Mixed	4	1,533	.14*	.07	.04 to .24	.14	.09 to .19	1.81
<i>Provider</i>								
Non- CJ	7	6,405	-.02	.04	-.07 to .03	-.02	-.05 to .00	2.03
CJ	49	282,040	.07**	.06	.03 to .10	.07	.07 to .08	122.48**
<i>With outliers removed</i>	39	272,028	.06**	.04	.04 to .09	.07	.06 to .08	
<i>Aftercare</i>								
No	36	26,786	.05*	.09	.02 to .08	.05	.04 to .06	43.72
Yes	6	2,042	.15	.19	-.03 to .32	.12	.08 to .16	12.41*
Inconsistent	7	2,885	.12*	.05	.04 to .20	.12	.09 to .16	1.5

*P<.05 **p<.001

Table 3.17. Reentry Program Effectiveness by Methodological Quality of Study

Characteristic	k	N	r	sd	CI	Z ⁺	CI	Q
Lower Quality	20	8,990	.08**	.08	.03 to .12	.08	.06 to .10	14.36
Higher Quality	38	280,135	.05*	.06	.01 to .09	.07	.06 to .07	122.04*
<i>With outliers removed</i>	25	262,904	.05**	.03	.03 to .09	.08	.03 to .12	28.32

*P<.05 **p<.001

The calculation of the fail safe N statistic indicated that an additional 108 studies would be needed to reduce the mean effect size of the voluntary participation category to zero, indicating confidence in the findings. Furthermore, an additional 102 studies would be needed for the non-voluntary participation category, and 52 studies would be needed for the mixed participation category mean effect size to approach zero.

When examining treatment providers, Table 3.16 shows that programs that were provided by criminal justice agencies had a significant effect on reducing recidivism .07 (CI = .03 to .10). However the Q statistic was also large and significant for this group 122.48, indicating a heterogeneous sampling distribution of studies. The fail safe N indicated that an additional 294 studies would be needed to reduce the mean effect size to zero. Recalculation of the model with outliers removed revealed similar results, the effect size was slightly smaller at .06, but still statistically significant (CI = .04 to .09). The fail safe N calculated for this category indicated that an additional 195 studies would be needed to reduce the mean effect size to zero. The treatment provided by non-criminal justice agencies did not have a significant result in recidivism -.02 (CI = -.07 to .03).

Lastly, there was a significant mean effect size for programs that did not provide aftercare .05 (CI = .02 to .08), and for programs who provided aftercare services, but did so inconsistently .12 (CI = .04 to .20). The mean effect size for programs who did provide after care was not significant .15 (CI = -.03 to .32), and the Q statistic for this group was significant 12.41, indicating that the results might be affected by heterogeneity between the studies. The fail safe N statistics for the three categories were; for the programs who provided aftercare 84 studies, for the programs who did not provide an aftercare component 144 studies, and for the category of

programs who provided aftercare inconsistently the number of studies needed to reduce the mean effect size to zero was 77 studies.

Methodological Quality of Study. Lastly, the mean effect sizes were calculated for the methodological quality of the studies. As mentioned in Chapter 3, all the studies were coded on certain methodological characteristics, and a methodological index was created to examine how the effect size varied by the research quality. The results are presented in Table 3.17. There were 20 studies that were included in the lower quality category, and 38 effect sizes were calculated for studies that were included in the higher quality category. The results indicate that both lower .08 (CI = .03 to .12) and higher quality studies .05 (CI = .01 to .08) had a positive and significant effect size. The lower quality studies have larger effect size, while confidence intervals are the same for both groups. However, the Q statistic was large and significant for the higher quality methods group, indicating heterogeneity between the studies. Therefore the category was recalculated with outliers removed. The effect size remained the same .05 and it was also significant (CI = .03 to .09).

The fail safe N calculations indicated that an additional 140 studies would be needed to reduce the mean effect size of the lower quality studies to zero, while an additional 152 studies would be needed to do the same for the higher quality study category. Doing the same with outliers removed indicated a fail safe N statistic of 100 studies.

Conclusion

This chapter has presented the results of several analyses assessing the impact of reentry programs on recidivism. The analyses presented have indicated that overall, reentry programs are effective in reducing recidivism. However, the results also indicate that reentry program effectiveness is moderated by several program characteristics including phases included in the

program, location of treatment, and treatment approach of offenders. The next chapter summarizes the findings, identifies the limitations of the current study, and discusses policy and theoretical implications of the findings.

CHAPTER 5

DISCUSSION

Introduction

The recent years have seen a tremendous increase in the development of reentry programs. To respond to the issues of ex-prisoners, starting in the late 1990s federal and state governments appropriated tremendous amounts of money to the development and evaluation of correctional reentry programs. The Second Chance Act allocated over \$100 million to the states for the creation and development of reentry programs between 2001 and 2004. The Act was signed into law in 2008 allocating another \$165 million in grants to state and local agencies to aid with the transition of ex-prisoners into communities.

Additionally, the Serious and Violent Offender Reentry Initiative (SVORI) allocated \$90 million to develop new programs, or continue existing programs that concentrated on improving employment, education, housing and recidivism rates for serious and violent offenders reentering their communities. This initiative funded programs between the years 2001 and 2007. More recently, in January 2011 the Attorney General funded the Federal Interagency Reentry Council, whose goal is to bring together 20 federal agencies in working towards helping ex-prisoners make a smoother transition into their communities. It becomes clear that the federal and state governments have been tremendously involved and spend a considerable amount of money in prisoner reentry programs.

And yet, research on reentry programs has produced mixed results, and only one study to date has tried to summarize the overall effect of reentry programs (Seiter & Kadela, 2003). Considering the amount of resources that have been allocated to support reentry programs, and the substantial number of reentry programs that have implemented, the issues is pressing. Still,

the “\$64,000 question” that Joan Petersilia asked in 2004: “what programs work in prisoner reentry?” has not been answered a decade later (Petersilia, 2004)

This dissertation sought to assist in filling the current gap that exists in the reentry program effectiveness research. More specifically, this dissertation sought to answer the following research questions: 1) Are reentry programs effective in reducing recidivism? And 2) What factors are associated with effective reentry programs? Through the use of meta-analytic techniques, this dissertation synthesized the currently available research to determine the impact of reentry programs on recidivism. This chapter will summarize the major findings presented in the previous chapter and provide a discussion of the implications.

Summary of the Findings

Data for this dissertation was collected from 53 outcome evaluations, which allowed for the coding of 58 distinct effect sizes. Data collected from the studies included participant characteristics; reentry programs characteristics, outcome characteristics, and methodological characteristics. To be consistent across the studies re-arrest was used as the outcome measure whenever possible. Analysis of the data provided the first synthesized overall effect of reentry programs. Thus, reentry programs significantly reduce recidivism by six percent. These findings are smaller than the overall effect size of correctional programs, which is about .10 (Andrews et al., 1990; Losel, 1995). Nevertheless, prior research has shown that there is considerable variability in effect sizes. Studies that adhere to the risk, need, responsivity, and fidelity principles, and are cognitive behavioral in nature are the most effective in reducing recidivism (Lipsey, 2009; McGuire, 2013).

Because reentry programs are so diverse, effect sizes were also calculated for a number of moderating variables, in an effort to assess which type of reentry programs is the most

effective one. A “true” reentry program offers treatment in three phases: an institutional phase, a transitional phase, and a community phase (Seiter & Kadela, 2003), therefore effect sizes were calculated for programs that adhered to this model, programs that consisted of two phases (usually institution and community), and one phase programs (pre or post release reentry programs). Three and two phase programs were both comparably significant in significantly reducing recidivism, with two phase programs having a slightly higher effect size ($es=.12$) than the three phase programs ($es=.11$). In contrast, programs that were delivered only throughout once phase did not have a significant effect on recidivism ($es=.03$; $CI = -.01$ to $.07$). While the Q was significant for this group suggesting that there might be additional factors that need to be explored, the findings propose that reentry programs that adhere more to the “true” model tend to be more effective in reducing recidivism. The effect size for this group became significant when removing the outliers from the analysis.

This finding is reinforced when looking at the results that considered the effectiveness of reentry programs by location of treatment. Thus, consistent with previous research (Gendreau, 1996; Gendreau et al, 2004), programs that were delivered in the community were significant in reducing recidivism by 11 percent ($es=.11$), while programs delivered in prison were not significantly effective. Programs that were delivered in phases in confinement and then the community were also found to significantly reduce recidivism, although their effect was modest ($Z^+ = .02$; $CI = .02$ to $.02$). The outpatient and mixed model programs also were significantly effective in reducing recidivism respectively at $.06$ and $.08$, while the community programs that employed a residential model were not significantly effective. However, the residential group had a significant Q statistic, implying that there are differences between the programs included in

the group. The fact that the residential programs offered in the community are not effective could be explained by systematic differences between them.

Reentry programs were also divided into groups based on the different type of program. As stated earlier, reentry programs tend to be very diverse ranging from reentry courts, to halfway houses, programs providing provisional employment, provisional housing, to programs that provide simple services such as monetary assistance. Therefore it was important to examine which programs resulted in lower recidivism rates. As such, therapeutic communities showed a significant effect in reducing recidivism ($es=.15$). This finding is interesting because all of the therapeutic communities examined in this dissertation adopted either a two phase or three phase program model. Thus, it appears that successful reentry programs adopt a transitional model for their treatment – meaning the reentry process and programming begins while the offenders are institutionalized, it is followed by a transitional period during which the conditions of confinement are relaxed, and continues when the offenders are released into the community. Consistent with prior research, continuity of treatment is linked to higher rates of recidivism reduction (Inciardi et al., 1997; Seiter & Kadela, 2003; Wexler et al., 1999).

Significant findings were also found for MICA programs ($es=.28$), an important finding since offender populations are known to have high rates of substance abuse, and higher rates of mental health problems than the general population (Petersilia, 2003; Glaze & Bonczar, 2011). The results support the “what works” literature arguments that addressing offender needs – specifically needs such as substance abuse and mental health that can be central contributors to criminal involvement, results in lower recidivism rates. In addition, programs that offered a variety of treatment were also significantly effective. Research on offender has consistently found that they have many needs (Petersilia, 2003; Travis, 2005). Additionally, McGuire (2013)

maintains that programs who address a multitude of issues (e.g., employment and antisocial attitudes) at one time have shown to be more effective in reducing recidivism. The current finding provides more support for this contention. However, the category had a significant Q statistic, implying heterogeneity between the studies in the sample.

Consistent with prior research (Lowenkamp & Latessa, 2005; Latessa et al., 2009), halfway houses included in the current meta-analysis were not significantly effective in reducing recidivism. Quite the opposite, they were found to be significant in increasing the recidivism of their participants by seven percent. Previous research on halfway house effectiveness has indicated that programs that fail to account for differences in the risk level of offenders are not effective in reducing recidivism (Lowenkamp & Latessa, 2005). Considering the fact that the studies that reported these findings were also included in the current study sample, the effect sizes calculated by this dissertation reinforce the previous findings.

Employment programs were not found to have a significant effect in reducing recidivism ($es=.00$; CI-.04 to .04). While the findings on employment programs have been inconsistent and the subject to much debate, the current finding falls in line with the Risk, Need and Responsivity literature that maintains that effective programs should target criminogenic needs (Gendreau, 1996). Because employment is considered one of the major goals of reentry, the findings are quite disheartening. However, Latessa (2012) maintains that while employment should continue to remain one of the goals of reentry programs, employment programs must incorporate the principles of effective intervention (i.e., address antisocial attitudes) in addition to providing employment assistance for their participants. The majority, of the employment programs that were included in the current meta-analysis consisted of provisional employment programs or work release programs. These type of employment programs simply provide employment

placement for the offenders, while failing to address the antisocial cognitions and/or thinking errors that contribute job loss and criminal behavior. Hence, while disappointing, the results provide once again more support for the contention that states that criminogenic needs should be addressed before or in conjunction with employment provision for offenders.

To examine the effect of different types of treatment modalities on recidivism, programs were also grouped by their primary treatment model. Therapeutic communities demonstrated a significant effect on recidivism once again ($es = .17$; $CI = .10$ to $.25$). On the other hand, cognitive behavioral programs were not significant in reducing recidivism. This finding is not consistent with prior research that shows that cognitive behavioral programs are some of the most effective offender treatment programs.

However, it should be noted that the sample size for the cognitive behavioral programs group consisted of only three studies, one of which evaluated the infamous Project Greenlight reentry program. While developed with good intentions, and striving to adhere to the best practice models, Project Greenlight was plagued by many implementation problems that resulted in disastrous recidivism effects for the program participants (Wilson & Davis, 2006). Implementation and adherence to treatment model (fidelity) is an important principle of effective correctional programs (Gendreau et al, 2004; McGuire, 2013), thus it can be speculated that the results obtained for the cognitive behavioral program group for this study could have come from incorrect implementation of the model.

Additionally, education based programs were not found to be effective ($es = .06$; $CI = -.05$ to $.17$). This disappointing result can be interpreted similarly to the results obtained for the employment programs. While educational programs target an important need area of offenders, they need to be offered in conjunction with programs that target antisocial attitudes and beliefs,

and equip offenders with prosocial skills. Additionally, supervision only programs, and programs that mainly offered referral services/ case management were also not found effective in reducing recidivism. This finding is in line with previous research that has consistently found that programs that only provide supervision and no programming have no effect on recidivism, and at times can even increase it (Andrews & Bonta, 2010). Furthermore, this finding provides additional support for the RNR model. Strictly supervision programs violate the principles of this model since they do not vary provision of treatment by the risk of the offender, they do not address any criminogenic needs, and do not vary the supervision conditions according to the responsivity principle. On the other hand, the case management/referral programs that were included in the current sample consisted of programs that provided mostly housing or employment referrals for offenders. These programs also typically do not adhere to the RNR model and do not address antisocial attitudes and beliefs of offenders, or equip them with prosocial skill sets to deal with everyday problems.

Programs that provided counseling services were found to be effective in reducing recidivism by 16% ($es=.16$; CI .04 to .28). The sample for this category was small (only six studies), however, some of the programs included into this category involve counseling services that involved the family of the offender. These types of programs have shown to reduce recidivism (McGuire, 2013).

Lastly, programs that were grouped under the Other treatment modality also has a significant effect in reducing recidivism ($es=.13$; CI .07 to .19). The programs in these categories included programs dispensing cash vouchers, and other basic need fulfillment programs. Petersilia (2003) and Travis (2003) address the fact that many offenders are indigent and are unable to fulfill their basic needs upon release. The finding provides support for the contention

that addressing the immediate needs that the offenders are met with upon their release, will facilitate a more successful reentry for many.

The effects of reentry programs were also examined by offender risk level. Prior research has shown that risk can have iatrogenic effects on the effect of a program (Lowenkamp & Latessa, 2002). Therefore this dissertation examined the mean effect sizes by risk category of offenders. Before examining the effect sizes it should be noted that the risk variable was not reported by the majority of the studies, only 23 out of the 53 studies reported the risk of their offenders. Furthermore, because of all the missing data, the risk categories examined presently have been collapsed to include studies that reported risk by author definition and those which reported it by an actuarial assessment.

Nevertheless, the findings are consistent with prior research findings and the RNR literature; the high risk group was statistically significant ($es = .07$; $CI = .01$ to $.13$), meaning programs that targeted high risk offenders produced a seven percent reduction in recidivism. Furthermore, still consistent with prior research, programs that targeted low risk offenders did not have a significant effect in reducing recidivism ($es = .06$; $CI = -.07$ to $.19$), and neither did the mixed risk groups. In fact the mixed risk group produced a negative effect size (meaning it increased recidivism), but this statistic was not significant ($es = -.02$; $CI = -.06$ to $.01$).

As significant effect was also found when dividing the programs by length of treatment. Programs that lasted 13 weeks or more had a positive significant effect on reducing recidivism by 12 percent ($es = .12$; $CI = .08$ to $.15$). This finding is consistent with previous research suggesting that treatment programs less than three months, or 12 weeks for this study's purpose, are insufficient in the length of time needed to bring about a change in behavior (Gendreau,

1996). In the same vein, the programs that were 12 weeks or shorter did not produce a significant effect on recidivism ($es=.00$; $CI = -.04$ to $.04$).

It is interesting to see that in all the categories participation in the program produced significant results in reducing recidivism. There has been much debate on the effectiveness of coerced treatment, yet previous research have shown that regardless of voluntary or involuntary commitment to a program, program participants entering a program involuntarily have the same treatment needs as their voluntary counterparts (Farabee, Prendergast & Anglin, 1998). It follows that the effects of the program should also be the same. The current findings seem to support this position, by showing positive effects for voluntarily attended reentry programs ($es= .05$; $CI = .01$ to $.09$), positive effects for programs that the offenders did not attend voluntarily ($es=.07$; $CI = .00$ to $.13$), and for those program that had a mixed approach and made mandatory parts of a program while allowing voluntary participation in other parts ($es= .12$; $CI = .04$ to $.20$). The confidence intervals for the three types of participation also overlap.

The findings on the provider of treatment show that criminal justice agencies had a significant effect on reducing recidivism ($es=.07$; $CI = .03$ to $.10$), while non-criminal justice agencies did not. This finding suggests that criminal justice agencies do a significantly better job at providing offender treatment. The problem could lie in the training and education of non-correctional staff on correctional best practices. Criminal justice professionals are more familiar with the problems of ex-prisoners, and consequently, better equipped to provide them with the services that they need. Non-criminal justice professionals should be informed about correctional best practices in order to provide effective programming.

The findings on the effect of aftercare programs on recidivism rate are somewhat perplexing. Prior research indicates that programs that provide aftercare components are more

effective in reducing recidivism, than programs that do not. However, the contrary is found when looking at the study findings. Thus, both programs that did not provide an aftercare program (es = .05; CI = .02 to .08) and programs that provided aftercare inconsistently for the participants (es = .12; CI = .04 to .20) had significant effects on recidivism, while programs who did provide an aftercare component did not (es = .05; CI = -.03 to .32). However, this group also had a significant Q which indicates that there might be other factors that need to be examined to further understand the findings. Another possibility is that when aftercare was provided, the length of time of the program exceeded the recommended 3-9 month length, and the programs experienced diminishing effects (Gendreau, 1996).

Lastly, program effectiveness was also examined by methodological quality of the study. Both lower and higher quality studies had a significant effect on reducing recidivism, however the lower quality studies had a slightly higher effect size (es= .08; CI .03 to .12) than the higher quality studies (es=.05; CI .01 to .08). The difference between the groups was not significant, as the confidence intervals of the two groups overlapped. However, the findings are consistent with previous meta- analyses that have measured effect size as moderated by study quality. Wilson, Mitchell, and MacKenzie (2003) found that drug courts with experimental designs had a lower mean effect size than drug courts that did not use experimental designs. Shaffer (2006) also found a bigger mean effect size for lower quality studies, even though both groups had significant mean effect sizes. In addition, Hanson, Boutgon, Helmus, and Hodgson (2009) found that effect sizes tended to be stronger for studies with weak research design when compared to strong research designs. The authors caution against reviewing only good quality studies, as effectiveness of treatment could be missed in the process.

To summarize, the findings from this dissertation are mainly consistent with prior research on effective correctional practices. It appears that reentry programs that adhere to the phase model in transitioning the offender from the institution to the community are significantly effective in reducing recidivism. Therapeutic communities were found to have a consistently significant effect throughout a few analyses. It was also found that they were more effective than cognitive behavioral programs which typically have more significant results (Gendreau, 1996).

The reason for this might be two-fold: first, therapeutic communities adequately fit the description of a “true” reentry program. The majority, if not all of the therapeutic community programs included in the sample had three phases in delivering their treatment. They started treatment in the institutions and followed the offender in the community for at least 90 days after release from the institution. Second, therapeutic communities have consistent program models and are implemented as intended (have high program fidelity), something that is often lacking from the other types of programs.

Consistent with prior research, and the principles of effective interventions, programs that adhered to the risk principle had higher effects in reducing recidivism (McGuire, 2013). Programs that were longer than 12 weeks or three months were also more effective in reducing recidivism rates. Treatments that were mandated by the criminal justice system had the same effect on recidivism as treatments that were voluntarily attended by ex-prisoners. Furthermore, treatments that were offered by criminal justice agencies were significantly more effective in reducing recidivism than programs that were offered by non-criminal justice agencies. Overall, these resulted in a six percent reduction in recidivism for reentry programs.

Policy Implications

The findings of this study are important not only on the theory level, but there are important policy implications of the results. Considering the substantial amount of resources that have been allocated for the use of reentry programs and initiatives, steps can be taken to increase the overall impact of reentry programs, and change the status of those programs that are currently ineffective.

Thus, reentry programs should start in the institution and continue the treatment in the community during the first months of release from prison. Ex-prisoners have a multitude of needs and are substantially different from offenders who are never incarcerated, therefore post-release programs might not be enough to address their criminogenic needs. In order to determine where the offender will be best placed, and how the offender will be best supervised in the community, the risk, needs, and responsivity of the offender should be assessed prior to release. Programs that target higher risk offenders have been shown to have significant effects on recidivism, and this study's findings were also in line with prior research.

At this time it is important to address a point that Petersilia (2004) raised a decade ago pertaining to the adherence of reentry programs to correctional effective practices. Petersilia (2004) argued that many reentry initiatives arise as a result of the collaboration between many agencies, and the findings of the "what works" literature are usually not considered by practitioners, policy makers, and task forces involved in developing reentry programs. While things have changed quite a bit (and for the better) during the last decade, many aspects of policy making and program development are still left to the "good intentions" of the entities involved in the process (Redcross et al., 2010; Redcross et al., 2012; Wilson & Davis, 2006).

Accountability for the effectiveness of correctional programs has increased, with many correctional grants requiring a performance evaluation. Yet, a quick scan of the outcome evaluations published in the last decade that were included in this study, shows that the majority of the programs are still not addressing the factors that influence offender recidivism. Risk is not being assessed by the majority of the programs, and consequently, is not being used to guide correctional programs placement. Many programs are mixing offenders of different risk levels, which directly contribute to the program's reduced effectiveness (Lowenkamp & Latessa, 2002).

Following risk principle, programs should provide the most intense and highest doses of treatment for high risk offenders, while reducing the intensity and the dosage for lower risk offenders. Grant requirements for reentry programs can include specifications to follow the principles of effective interventions in developing new reentry programs, or to modify existing programs to fit the model of correctional best practices. In addition, assessing for needs and responsibility of offenders allows for the provision of adequate programs to address offender needs, and ensures that the offenders' personal attributes fit with the treatment.

Moreover, the results indicated once more that ex-prisoners need services upon their release, and more specifically, they need more substantial services than strict supervision, or simple referrals for housing or employment. While supporting indigent offenders meet their basic needs is important, effective programming that addresses dynamic criminogenic needs, mental health, and substance abuse delivers results in reducing recidivism rates. Maintaining lifestyles free of criminal behavior is the first, and most important step in achieving successful reintegration into the community.

Additionally, while reentry programs are addressing some pressing ex-prisoner needs, such as employment and housing, treatment components that address criminogenic needs, such

as antisocial attitudes and associates should be included with these programs, or addressed before the offender is enrolled in an employment or housing program. As Latessa (2012) maintains, employment programs, while important, will continue to be ineffective if the offenders' attitude about honest work is not addressed first.

Continuing in the same vein, the length of treatment should be between the recommended effective correctional practices, specifically between three and nine months. Coding of the studies revealed substantial differences in program length for reentry programs. A minimum of three months is needed to produce any changes in behavior in program participants. Yet some of the programs coded for the current study provided what was considered the treatment part of the program in just a few sessions, or even hours.

Training and evaluation of staff on the effective correctional practices is also another area that can be improved. This dissertation found significant differences between correctional and non-correctional programs as they relate to reductions in recidivism. If services to ex-prisoners are outsourced to non-correctional facilities, it is imperative that the non-correctional staff is trained on effective correctional practices. Furthermore, criminal justice staff should also receive continual training on best practices and effective correctional practices continually.

While provision of aftercare was not found significant in the current study, prior research has shown that programs that provide aftercare are more successful in reducing recidivism rates. The aftercare component should be a required component of reentry programs to allow for the offenders to have continual support during the last phases of their transition into the communities.

Lastly, despite all the money that has been allocated on reentry programs during the last decade and a half, and the hundreds (and maybe thousands) of reentry programs that have been

funded through these resources, the current study could only allocate 53 studies of adult reentry programs that contained enough information to calculate the effect size statistics. There exists an absolute need for more rigorous evaluation studies in the topic of reentry. This will allow for further synthesizing of overall effect sizes, and exploration of the effect of moderator variables that are too scarce for exploration at the moment.

Limitations of Current Study

One of the main limitations of the current study was the amount of missing data resulting from the coding of studies. Many of the studies included in the meta-analysis had large amounts of missing data, many times in simple sample demographics such as age, race, and gender of the treatment and comparison groups. Risk was not recorded in the majority of the studies, and even in some of the studies where it was recorded. It was not adequately reported. Furthermore, important static risk factors such as prior criminal activity, prior and current violent offenses, and sexual offenses were missing from many of the study sample.

Additionally, descriptions of the study methods and procedures were quite scanty in many of the studies. Specifically information on intensity of treatment, and dosage was missing for the majority of the studies. Therefore moderator effects pertaining to these variables were not explored due to the large amount of missing data. Furthermore, many studies did not include information on completion rates, which is an important factor in examining factors associated with program success. The large amount of missing data resulted in the exploration of many of the moderating variables with limited effect size samples.

The prevalence of missing data during the coding process brings to light an important implication for researchers and academics. Articles and research reports need to do a better job of reporting the data surrounding the studies. Meticulousness in the reporting of data translates

into better replications of studies and in the case of meta-analyses, exploration of additional factors that could be responsible for improving program effectiveness. Factors such as program attendance, attrition, program completion, program fidelity, and dosage of delivered treatment have significant effects on program effectiveness. However they are very inconsistently reported by researchers. The goal of meta-analyses is to organize research. But the task becomes almost unmanageable, and even irrelevant when this very research has many gaping holes in it.

Nevertheless, it is important to note that this study is the first step in synthesizing the collective effects of reentry programs in recidivism. Therefore it is likely that the current measurements need refinement and new measures may need to be introduced into the models to achieve more precise measurements. However, it is important to continue collecting studies and to build the database of reentry court evaluations. Despite the limitations, this study presented the first meta-analytic review of reentry programs and contains a number of important findings.

References

References marked with an asterisk () indicate studies used in the meta-analysis.

- Abrams, L. S., & Snyder, S. M. (2010). Youth offender reentry: Models for intervention and directions for future inquiry. *Children & Youth Services Review, 32*(12), 1787-1795.
- Altschuler D. M., & Armstrong, T. L. (1994). *Intensive aftercare for high-risk juveniles: A community care model*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice.
- Altschuler D. M., & Armstrong, T. L. (2002). Juvenile corrections and continuity of care in a community context – The evidence and promising directions. *Federal Probation, 66*(2), 72-77.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically-relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369-404.
- Aos, S. (2004). *Washington State's family integrated transitions program for juvenile offenders: outcome evaluation and benefit-cost analysis*. Olympia: Washington State Institute for Public Policy.
- Blumstein, A. (2011). Bringing down the U.S. prison population. *The Prison Journal, 91*(3), 12S-26S.
- Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin, 123*, 123-142.
- *Bouffard J. A., & Bergeron, L. E. (2006). Reentry works. *Journal of Offender Rehabilitation, 44*(2), 1-29.
- *Braga, A. A., Piehl, A. M, & Hureau, D. (2009). Controlling violent offenders released to the community: An evaluation of the Boston Reentry Initiative. *Journal of Research in Crime and Delinquency, 46*(4), 411-436.
- Buckaloo, B. J., Krug, K. S., & Nelson, K. B. (2009). Exercise and the low-security inmate: Changes in depression, stress, and anxiety. *The Prison Journal, 89*, 328-343.
- Burraston, B. O., Cherrington, D. J., & Bahr, S. J. (2010). Reducing juvenile recidivism with cognitive training and a cell phone follow-up: An evaluation of the RealVictory program. *Journal of Offender Therapy and Comparative Criminology, XX*(X), 1-20.

- *Butzin, C. A., Scarpitti, F. R., Nielsen, A., Martin, S. S., & Iinciardi, J. A. (1999). Measuring the impact of drug treatment: beyond relapse and recidivism. *Corrections Management Quarterly*, 3, 4.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic Press.
- Clear, T. R. & Schrantz, D. (2011). Strategies for reducing prison populations. *The Prison Journal*, 91(3), 138S-159S.
- Close, D. W., Aubin, M., & Alltucker, K. (2008). *The District of Oregon reentry court: Evaluation, policy recommendations, and replication strategies*. Research Report. Eugene: U.S. District Court of Oregon.
- Collaborative Outcome Data Committee (2007). *Sexual Offender Treatment Outcome Research: CODC guidelines for Evaluation. Part 1: Introduction and Overview*. Public Safety Canada.
- Cullen, F., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. In *Policies, Processes, and Decisions of the Criminal Justice System, Criminal Justice* 3, 109-176. Washington, D. C.: U.S. Department of Justice.
- Cummings, G., & Finch, S. (2005). Inference by eye: Confidence intervals and how to read pictures of data. *American Psychologist*, 60, 170-180.
- Ditton, P. M., & Wilson, D. J. (1999). *Truth-in-Sentencing in State Prisons*. (NCJ Publication No. 170032. Washington, D. C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice*, 32, 31-47.
- *Dowell, D. A., Klein, C., Krichmar, C. (1985). Evaluation of a halfway house for women. *Journal of Criminal Justice*, 13, 217-226.
- Durlak, J. A., & Lipsey, M. W. (1991). A practitioner's guide to meta-analysis. *American Journal of Community Psychology*, 19, 291-332.
- *Duwe, G. (2011). The benefits of keeping idle hands busy: An outcome evaluation of a prisoner reentry employment program. *Crime & Delinquency*, 22, 1-28.
- *Duwe, G. (2012). Evaluating the Minnesota Comprehensive Offender Reentry Plan (MCORP): Results from a randomized experiment. *Justice Quarterly*, 29, 347-383.
- *Duwe, G., & Kerschner, D. (2008). Removing a nail from the boot camp coffin: An outcome evaluation of Minnesota's challenge incarceration program. *Crime & Delinquency*, 54, 614 - 643.

- *Duwe, G., & King, M. (2012). Can faith-based correctional programs work? An outcome evaluation of the Innerchange Freedom Initiative in Minnesota. *International Journal of Offender therapy and Comparative Criminology*, 20, 1-29
- *Farole, D. J. (2003). *The Harlem Parole Reentry Court evaluation: Implementation and preliminary impacts*. New York, NY: Center for Court Innovation.
- Farabee, D., Prendergast, M., & Anglin, M. D. (1998). The effectiveness of coerced treatment for drug-abusing offenders. *Federal Probation*, 62, 3-10.
- *Farrell, A. (2000). Women, crime and drugs. *Women & Criminal Justice*, 11, 21-48.
- Farrell, A., & Wunderlich, K. (2009). *Evaluation of the Court Assisted Recovery Effort (C.A.R.E.) Program—United States District Court for the District of Massachusetts*.
- Faul, F. & Erdfelder, E. (1992). *GPOWER: A priori, post-hoc, and compromise power analyses for MS-DOS [computer programme]*. Bonn, FRG: Bonn University, Department of Psychology.
- *Field, G. (1985). The Cornerstone program: A client outcome study. *Federal Probation*, 49, 50-55.
- Fontaine, J., Gilchrist-Scott, D., & Horvath, A. (2011). *Supportive housing for the disabled reentry population: The District of Columbia Frequent Users Service Enhancement pilot program*. Washington, D. C.: Justice Policy Center. Urban Institute.
- *Fontaine, J., Gilchrist-Scott, D., Roman, J., Taxy, S., & Roman, C. (2012). *Supportive housing for returning prisoners: Outcomes and impacts of the Returning Home-Ohio pilot project*. Washington D. C.: Justice Policy Center. Urban Institute.
- Geller, A., Garfinkel, I., & Western, B. (2011). "Paternal Incarceration and Support for Children in Fragile Families." *Demography*. 48(1): 25-47
- Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Beverly Hills, CA: Sage.
- Glaze, L. E., Bonczar, T. P., & Zhang, F. (2010). *Probation and Parole in the United States, 2009*. NCJ 231680. Washington, D. C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://www.bjs.gov/content/pub/pdf/ppus09.pdf>.
- Glaze, L. E., & Bonczar, T. P. (2011). *Probation and Parole in the United States, 2010*. NCJ 236019. Washington, D. C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://www.bjs.gov/content/pub/pdf/ppus10.pdf>.

- Glaze, L. E., & Maruschak, L. M. (2008). *Parents in Prison and Their Minor Children*, NCJ 222984. Washington, D. C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/pptmc.pdf>.
- Glaze, L. E., & Maruschak, L. M. (2010). *Parents in Prison and Their Minor Children*, NCJ 222984. Washington, D. C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/pptmc.pdf>.
- Guerino, P., Harrison, P.M., & Sabol, W.J. (2011). *Prisoners in 2010*. Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/p10.pdf>
- *Hall, E. A., Prendergast, M. L., Wellisch, J., Pattern, M., & Cao, Y. (2004). Treating drug-abusing women prisoners: an outcomes evaluation of the Forever Free program. *The Prison Journal*, 84, 81-105.
- *Hamilton, Z. K. (2011). Adapting to bad news: Lessons from the Harlem Parole Reentry Court. *Journal of Offender Rehabilitation*, 50(7), 385-410.
- Hamilton, Z. K., & Campbell, C. M. (2013). A dark figure of corrections: Failure by way of participation. *Criminal Justice and Behavior*, 40(2), 180-202.
- *Hamilton, Z., Kigerl, A., & Hays, Z. (2013). Removing release impediments and reducing correctional costs: evaluation of Washington State's housing voucher program. *Justice Quarterly*, 1, 1-33.
- Hammett, T., Roberts, C., & Kennedy, S. (2001). Health-related issues in prisoner reentry. *Crime & Delinquency*, 47(3), 390-409.
- Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). *A meta-analysis of the effectiveness of treatment for sexual offenders: Risk, need, and responsivity*. Public Safety Canada.
- Harlow, C. W. (2003). *Education and Correctional Populations*. NCJ 195670. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/ecp.pdf>.
- Harrison, P.M., & Karberg, J.C. (2003). *Prison and Jail Inmates at Midyear 2002*. Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice.
- Hartwell, S. (2004). Triple stigma: Persons with mental illness and substance abuse problems in the criminal justice system. *Criminal Justice Policy Review*, 15, 84-99.

- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. New York: Academic Press.
- *Heilburn, K., DeMatteo, D., Fretz, R., Erickson, J., Gerardi, D., & Halper, C. (2008). Criminal recidivism of female offenders: The importance of structured, community-based aftercare. *Corrections Compendium*, 33(2).
- *Hiller, M. L., Knight, K., & Simpson, D. D. (1999). Prison-based substance abuse treatment, residential aftercare and recidivism. *Addiction*, 94(6), 833-842.
- Hughes, T., & Wilson, D. J. (2002). *Reentry Trends in the United States*. Washington, D. C.: Bureau of Justice Statistics. Retrieved from <http://www.ojp.usdoj.gov/bjs/reentry/reentry.htm>.
- Hunt, M. (1997). *How science takes stock: The story of meta-analysis*. New York: Russell Sage.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis*. Newburk Park, CA: Sage Publications.
- Hunter, J. E., & Schmidt, F. L. (2000). Fixed effects vs. Random effects meta-analysis models: Implications for cumulative research knowledge. *International Journal of Selection and Assessment*, 8, 275-292.
- *Inciardi, J. A., Martin, S. S., Butzin, C. A., Hooper, R. M., & Harrison, L. D. (1997). An effective model of prison-based treatment for drug-involved offenders. *Journal of Drug Issues*, 27(2), 261-278.
- Izzo, R. I., & Rozz, R. R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents. *Criminal Justice and Behavior*, 17, 134-142.
- *Jacobs, E. (2012). *Returning to work after prison: Final results from the Transitional Jobs Reentry Demonstration*. Research report. MDRC. New York, NY.
- *Jacobs, E., & Western, B. (2007). *Report on the evaluation of the comALERT prisoner reentry program*. Unpublished manuscript.
- James, C., Stams, G. J., Asscher, J. J., De Roo, A. K., Van Der Laan, P. H. (2013). Aftercare programs for reducing recidivism among juvenile and young adult offenders: A meta-analytic review. *Clinical Psychology Review*, 33, 263-274.
- *Jengeleski, J. L., Gordon, M. S. (March, 2003). The Kintock Group, Inc. Employment Resource Center: A two-year post-release evaluation study. *Journal of Correctional Education*, 54, 27-30.
- Jonson, C. L. (2010). *The impact of imprisonment on reoffending: A meta-analysis*. Doctoral Dissertation. Division of Criminal Justice. University of Cincinnati. Cincinnati, OH.

- *Johnson, B., & Larson, D. (2008). *The Inner Change freedom initiative: a preliminary evaluation of a faith-based prison program*. Baylor University. Waco, TX.
- Josi, D. A., & Sechrest, D. K. (1999). A pragmatic approach to parole aftercare: Evaluation of a community reintegration program for high-risk youthful offenders. *Justice Quarterly*, 16(1), 51-80.
- Karberg, J. C., & James, D. J. (2005). *Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002*. NCJ 209588. Washington, D. C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/sdatji02.pdf>.
- *Kesten, K. L., Leavitt-Smith, E., Rau, D. R., Shelton, D., Zhang, W., Wagner, J., & Trestman, R. L. (2012). Recidivism rates among mentally ill inmates: Impact of the Connecticut Offender Reentry Program. *Journal of Correctional Health Care*, 18, 20-28.
- *Knight, K., Simpson, D. D., Chatham, L. R., & Camacho, L. M. (1997). An assessment of prison-based drug treatment: Texas' In-prison Therapeutic Community program. *Journal of Offender Rehabilitation*, 24(3/4), 75-100.
- *Knight, K., Simpson, D. D., Hiller, M. L. (1999). Three year re-incarceration outcomes for in-prison therapeutic community treatment in Texas. *The Prison Journal*, 79, 337-351.
- Koons, B., Burrow, J., Morash, M., & Bynum, T. (1997). Expert and offender perceptions of program elements linked to successful outcomes for incarcerated women. *Crime & Delinquency*, 43(4), 512-532.
- Landis, J.R.; Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics* 33, 159–174.
- Latessa, E. (2012). Why work is important, and how to improve the effectiveness of correctional reentry programs that target employment. *Criminology & Public Policy*, 11(1), 87-91.
- Latessa, E., & Allen, H. E. (1982). Halfway houses and parole: A national assessment. *Journal of Criminal Justice*, 10, 153-163.
- *Latessa, E., Lovins, B. K., & Ellefson, B. (2007). *Children of Incarcerated Parents: Breaking the cycle*. Center for Criminal Justice Research, University of Cincinnati, Cincinnati, OH.
- Latessa, E., Lovins, L., & Smith, P. (2010). *Follow-up evaluation of Ohio's community based correctional facility and halfway house programs – outcome study*. Technical Report. Cincinnati, OH: Corrections Institute. University of Cincinnati.

- *Latessa, E., Lowenkamp, C., & Bechtel, K. (2009). *Community corrections centers, parolees, and recidivism: An investigation into the characteristics of effective reentry programs in Pennsylvania*. Technical Report. Cincinnati, OH: Center for Criminal Justice Research. University of Cincinnati.
- Lattimore, P.K., & Visser, C. A. (2009). *The multi-site evaluation of SVORI: Summary and synthesis*. Research Triangle Park, NC: RTI International.
- *Lattimore, P.K., Steffey, D. M., & Visser, C. A. (2010). *Prisoner reentry experiences of adult males: characteristics, service receipts, and outcomes of participants in the SVORI multi-site evaluation*. RTI International, NC.
- Lattimore, P. K., Steffey, D. M., Visser, C. A. (2010). Prisoner reentry in the first decade of the twenty-first century. *Victims and Offenders, 5*, 253-267.
- Lattimore, P. K., Barrick, K., Cowell, A., Dawes, D., Steffey, D., Tueller, S., & Visser, C. A. (2012). *Prisoner reentry service: What worked for SVORI evaluation participants?* Final Report. Research Triangle Park, NC: RTI International.
- Lee, L. C., & Stohr, M. K. (2012). A critique and qualified defense of “correctional quackery”. *Journal of Contemporary Criminal Justice, 28*(1), 96-112.
- *Lindquist, C. H., Lattimore, P. K., Barrick, K., & Visser, C. A. (2010). *Prisoner reentry experiences of adult females: Characteristics, service receipts, and outcomes of participants in the SVORI multi-site evaluation*. Research Triangle Park, NC: RTI International.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. D. Cook, G. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. J. Light, T. A. Louis, & F. Mosteller (Eds.), *Meta-analysis for explanation: A casebook* (pp. 83-127). New York: Russell Sage.
- Lipsey, M. 1999. Can intervention rehabilitate serious delinquents? *Annals of the American Academy of Political and Social Science, 564*, 142–166.
- Lipsey, M.W. (2009) The primary factors that characterize effective interventions with juvenile offenders: a meta-analytic overview. *Victims and Offenders, 4*, 124– 147.
- Lipsey, M., & Wilson, D. (2001). *Practical Meta-Analysis*. Sage Publications.
- Losel, F. (1995). Increasing consensus in the evaluation of offender rehabilitation: Lessons from research synthesis. *Psychology, Crime and Law, 2*, 19-39.

- Lovell, D., Johnson, C., Jemelka, R., Harris, V., & Allen, D. (2001). Living in prison after residential mental health treatment: A program follow-up. *The Prison Journal*, 81, 473-490.
- Lowenkamp, C. T., & Bechtel, K. (2010). *An evaluation of the Accelerated Community Entry (ACE) program – Preliminary Report*. Research Report.
- *Lowenkamp, C.T. & Latessa, E.J. (2002). *Evaluation of Ohio's community based correctional facilities and halfway house programs*. Technical Report. Cincinnati, Oh: Center for Criminal justice Research. University of Cincinnati.
- Lowenkamp, C.T. & Latessa, E.J. (2005). Increasing the effectiveness of correctional programming through the risk principle: Identifying offenders for residential placement. *Criminology and Public Policy*, 4, 501–528.
- MacKenzie, D. L. (2013). First do no harm: A look at correctional policies and programs today. *Journal of Experimental Criminology*, 9(1), 1-17.
- *Markman, J. A., Fontaine, J., Roman, J. K., & Nadeau, C. A. (2010). *Evaluation of the ODRC and corporation for supportive housing's pilot program: Interim re-arrest analysis*. Urban Institute. Washington, D.C.
- *Martin, S. S., Butzin, C. A., Saum, C. A., Inciardi, J. A. (1999). Three year outcomes of therapeutic community treatment for drug involved offenders in Delaware from prison to work release to aftercare. *The Prison journal*, 79, 294-320.
- Martinson, R. (1974). *What works? Questions and answers about prison reform*, *Public Interest*, 35, 22-54.
- Maxfield, M. G., & Babbie, E. R. (2012). *Basics of research methods for criminal justice and criminology*. (3rd ed.). Cengage Learning.
- Maruschak, L. M. & Beavers, R. (2009). *HIV in Prisons, 2007-08*. NCJ 228307. Washington, D.C: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/hivp08.pdf>.
- McGuire, J. (2013). 'What works' to reduce re-offending: 18 years on. In L. A. Craig, L. Dixon, & T. A. Gannon (Eds.), *What works in offender rehabilitation: An evidence-based approach to assessment and treatment*. Chichester, West Sussex, UK: Wiley-Blackwell.
- *McKiernan, P., Shamblen, S. R., Collins, D.A., Strader, T. N., Kokoski, C. (2013). Creating lasting family connections: reducing recidivism with community-based family strengthening model. *Criminal Justice Policy Review*, 24, 94-122.

- Metraux, S., & Culhane, D. P. (2004). Homeless shelter use and reincarceration following prison release: Assessing the risk. *Criminology & Public Policy*, 3(2), 201-222.
- Nelson, M., Deess, P., & Allen, C. (1999). *The First Month Out: Post-Incarceration Experiences in New York City*. New York: The Vera Institute of Justice.
- Olson, D. E., Rozhon, J., & Powers, M. (2009). Enhancing prisoner reentry through access to prison-based and post-incarceration aftercare treatment: experiences from the Illinois Sheridan Correctional Center therapeutic community. *Journal of Experimental Criminology*, 5, 299-321.
- Osgood D. W., Foster, E. M., Flanagan, C., & Ruth, G. R. (Eds.). (2005). *On your own without a net: The transition to adulthood for vulnerable populations*. Chicago, IL, U.S.: University of Chicago Press.
- Orwin, R. G. (1983). A Fail-safe N for effect size in meta-analysis. *Journal of Educational Statistics*, 8(2), 157-159.
- Parke, R., & Clarke-Stewart, K. A. (2002). *Effects of parental incarceration on young children*. Washington, D.C.: U.S. Department of Health and Human Services.
- Petersilia, J. (2003). *When prisoners come home: Parole and prisoner reentry*. New York: Oxford University Press.
- Petersilia, J. (2004). What works in prisoner reentry? Reviewing and questioning the evidence. *Federal Probation*, 68(2), 4-10.
- Pettit, B., & Lyons, C. (2003). *The consequences of incarceration on employment and earnings over the life course: Evidence from Washington State*. Seattle: University of Washington.
- Pratt, T. C. (2001). *Assessing the relative effects of macro-level predictors of crime: A meta-analysis*. Doctoral Dissertation. Division of Criminal Justice. University of Cincinnati. Cincinnati, OH.
- Pratt T. C., & Maahs, J. (1999). Are private prisons more cost-effective than public prisons? A meta-analysis of evaluation research studies. *Crime and Delinquency*, 45(3), 358-371.
- *Prendergast, M. L., Wellisch, J., & Wong, M. M. (1996). Residential treatment for women parolees following prison-based drug treatment: Treatment experiences, needs and services, outcomes. *Prison Journal*, 76(3), 253-274.
- *Prendergast, M. L., Hall, E. A., Wexler, H. K., Melnick, G., & Cao, Y. (2004). Amity Prison-based therapeutic community: 5 year outcomes. *The Prison Journal*, 84, 36-60.
- Raphael, S. (2011). Incarceration and prisoner reentry in the United States. *The Annals of the American Academy*, 635, 192-214.

- *Redcross, C., Bloom, D., Jacobs, E., Manno, M., Muller-Ravett, S., Seefeldt, K., Yahner, J., Young, Jr., A., & Zweig, J. (2010). *Work after prison: One-year findings from the Transitional Jobs Reentry Demonstration*. Technical Report. MDRC. New York, NY.
- *Redcross, C., Millenky, M., Rudd, T., & Levshin, V. (2012). *More than a job: Final results from the evaluation of the Center for Employment Opportunities (CEO) transitional jobs*
- *Robbins, C. A., Martin, S. S., & Surrat, H. L. (2009). Substance abuse treatment, anticipated maternal roles, and reentry success of drug-involved women prisoners. *Crime & Delinquency*, 55(3), 388-411.
- Roman, C. G., Fontaine, J., Fallon, J., Anderson, J., & Rearer, C. (2012). Defending and managing the pipeline: lessons for running a randomized experiment in a correctional institution. *Journal of Experimental Criminology*, 8, 307-329.
- Rosenthal, R. (1979). The 'file drawer' problem and tolerance for null results. *Psychological Bulletin*, 86, 638-641.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: Sage Publications.
- Rosenthal, R. (1994). Parametric measures of effect size. In Cooper, H. and L.V. Hedges (Eds.), *The Handbook of Research Synthesis*. New York: Russell Sage Foundation.
- Rosenthal, R., & DiMatteo, M. R. (2001). Meta-analysis: Recent developments in quantitative methods for literature reviews. *Annual Review of Psychology*, 52, 59-82.
- Sabol, W. J., Rosich, K., Kane, K. M., Kirk, D. P., & Dubin, G. (2002). *The influences of truth-in-sentencing reforms on changes in states' sentencing practices and prison populations*. Research Report. Washington, D. C.: Justice Policy Center. Urban Institute.
- *Sacks, S., Chaple, M., Sacks, J. Y., McKendrick, K., & Cleland, C. M. (2012). Randomized trial of a reentry modified therapeutic community for offenders with co-occurring disorders: crime outcomes. *Journal of Substance Abuse Treatment*, 42, 247-259.
- *Sacks, S., Sacks, J. Y., McKendrick, K., Banks, S., Stommel, J. (2004). Modified TC for MICA offenders: crime outcomes. *Behavioral Sciences and the Law*, 22, 477-501.
- Scargle, J. (2000). Publication bias: The "file-drawer" problem in scientific inference. *Journal of Scientific Exploration*, 14(1), 91-106.
- Schmidt, F. (2010). Detecting and Correcting the lies that data tell. *Perspectives on Psychological Science*, 5, 233-242.

- Schmidt, F., Oh, I., & Hayes, T. (2009). Fixed-versus random-effects models in a meta-analysis: Model properties and an empirical comparison of differences in results. *British Journal of Mathematical and Statistical Psychology*, 62, 97-128.
- Scott, C. K., & Dennis, M. L. (2012). The first 90 days following release from jail: Findings from the Recovery Management Checkups for Women Offenders (RMCWO) experiment. *Drug and Alcohol Dependence*, 125, 110-118.
- Seiter, R. P., & Kadela, K. R. (2003). Prisoner reentry: What works, what does not, and what is promising. *Crime & Delinquency*, 49(3), 360-388.
- Shaffer, D. K. (2006). *Reconsidering drug court effectiveness: A meta-analysis*. Doctoral Dissertation. Department of Criminal Justice, University of Cincinnati. Cincinnati, OH.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S. D. (1998). *Preventing crime: What works, what doesn't, what's promising*. [Monograph]. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Slavin, R. E. (1995). Best evidence synthesis: An intelligent alternative to *meta-analysis*. *Journal of Clinical Epidemiology*, 48(1), 9-18.
- Smith, P., Cullen, F. T., & Latessa, E. J. (2009). Can 14,737 women be wrong? A meta-analysis of the LSI-R and recidivism for female offenders. *Criminology & Public Policy*, 8(1), 183-208.
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 32, 752-760.
- Solomon, A. L., Visher, C., La Vigne, N. G., & Osborne, J. (2006). *Understanding the challenges of prisoner reentry: Research findings from the urban institute's prisoner reentry portfolio*. Washington, DC: The Urban Institute, Justice Policy Center.
- Steadman, H. J., Osher, F., Robbins, P. C., Case, B., Samuels, S. (2009). Prevalence of serious mental illness among jail inmates. *Psychiatric Services*, 60(6), 761-765.
- Steen, S., Lacock, T., & McKinzey, S. (2012). Unsettling the discourse of punishment? Competing narratives of reentry and the possibilities for change. *Punishment & Society*, 14(1), 29-50.
- *Taylor, C. J. (2013). Tolerance of minor setbacks in a challenging reentry experience: An evaluation of a federal reentry court. *Criminal Justice Policy Review*, 24(1), 49-70.
- Travis, J. (2001). But they all come back: Rethinking prisoner reentry. *Corrections Management Quarterly*, 5(3), 23-33.

- Travis, J. (2005). *But they all come back. Facing the challenges of prisoner reentry*. Washington, D. C. The Urban Institute.
- Travis, J., & Visser, C., (Eds). (2005). *Prisoner reentry and crime in America*. New York: Cambridge University Press.
- *Turner, S., & Petersilia, J. (1996). Work release in Washington: Effects on recidivism and Corrections costs. *Prison Journal*, 76(2), 138-164.
- Uggen, C., & Staff, J. (2001). Work as a turning point for criminal offenders. *Corrections Management Quarterly*, 5(4), 1-16.
- Vance, S. E. (2011). Federal reentry court programs: A summary of recent evaluations. *Federal Probation*, 75(2), 64-73.
- *Van Voorhis, P., Spruance, L. M., Ritchey, P. N., Listwan, S. J., & Seabrook, R. (2005). The Georgia cognitive skills experiment: A replication of Reasoning and Rehabilitation. *Criminal Justice and Behavior*, 31(3), 282-305.
- *Ventura-Miller, H., & Miller, M. (2010). Community in-reach through jail reentry: findings from a quasi-experimental design. *Justice Quarterly*, 27, 893-910.
- Visser, C., Debus, S., & Yahner, J. (2008). *Employment after Prison: A Longitudinal Study of Releasees in Three States*. Washington, DC: Urban Institute.
- Visser, C., & Travis, J. (2011). Life on the outside: Returning home after incarceration. *The Prison Journal*, 91(3), 102S-119S.
- Visser, C., Winterfield, L., & Goggeshall, M. B. (2005). Ex-offender employment programs and recidivism: A meta-analysis. *Journal of Experimental Criminology*, 1, 295-315.
- Visser, C., Yahner, J., & La Vigne, N. G. (2010). *Life after Prison: Tracking the Experiences of Male Prisoners Returning to Chicago, Cleveland, and Houston*. Washington, DC: Urban Institute.
- Walmsley, R. (2011). *World Prison Population List* (9th ed.). International Centre for Prison Studies. Available from www.nicic.gov.
- West, W. J., & Sabol, H. C. (2011). *Prisoners in 2009*. Bureau of Justice Statistics Bulletin. Washington, D. C.: U.S. Department of Justice. Office of Justice Programs. Bureau of Justice Statistics.
- *Wexler, H. K., DeLeon, G., Thomas, G., Kressel, D., & Petters, J. (1999). The Amity prison TC evaluation: Re-incarceration outcomes. *Criminal Justice and Behavior*, 26, 147-167.

- *Wexler, H. K., Melnick, G., Lowe, L., & Peters, J. (1999). Three-year incarceration outcomes for Amity in-prison therapeutic community and aftercare in California. *The Prison Journal*, 79, 321-336.
- *White, M. D., Saunders, J., Fisher, C., & Mellow, J. (2012). Exploring inmate reentry in a local jail setting: implications for outreach, service use, and recidivism. *Crime and Delinquency*, 58, 124-146.
- *Wikoff, N., Linhorst, D. M., & Morani, N. (2012). Recidivism among participants of a reentry program for prisoners released without supervision. *Social Work Research*, 36(4), 289-299.
- Wilkinson, R. (2001). Offender reentry: A storm overdue. *Corrections Management Quarterly*, 5(3), 46-51.
- *Willison, J. B., Roman, C. G., Wolff, A., Correa, V., & Knight, C. R. (2010). *Evaluation of the Ridge House residential program: Final report*. Research Report. Washington, D. C.: Urban Institute.
- *Wilson J. A., & Davis, R. (2006). Good intentions meet hard realities: An evaluation of the Project Greenlight reentry program. *Criminology & Public Policy*, 5(2), 303-338.
- Wolf, F. M. (1986). *Meta-analysis: Quantitative Methods for Research Synthesis*. Sage University Paper Series, (vol.59). Sage Publications.
- Wormith, J. S., Althouse, R., Simpson, M., Reitzel, L. R., Fagan, T. J., & Morgan, R. D. (2007). The rehabilitation and reintegration of offenders: The current landscape and some future directions for correctional psychology. *Criminal Justice and Behavior*, 34(7), 879-892.
- Yeaton, W. H., & Wartmon, P. M. (1993). On the reliability of meta-analytic reviews: The role of inter-coder agreement. *Evaluation Review*, 17, 292-309.
- *Zanis, D. A., Mulvaney, F., Coviello, D., Alterman, A. I., Savitz, B., Thompson, W. (2003). The effectiveness of early parole to substance abuse treatment facilities on 24 month criminal recidivism. *Journal of Drug Issues*, 33, 223-235.
- *Zhang, S. X., Roberts, R. E., & Callanan, V. J. (2005). Multiple Services on a Statewide Scale: The Impact of the California Preventing Parolee Crime Program. *Corrections Compendium* 30, 30-35.
- *Zweig, J., Yahner, J., Redcross, C., (2010). *Recidivism effects of the Center for Employment Opportunities (CEO) Program Vary by Former Prisoners' Risk of Reoffending*. The Urban Institute, MDRC. Washington, D. C.

APPENDIX A

RE-ENTRY META-ANALYSIS CODING GUIDE

REFERENCE (STUD1):

CODING INFORMATION

CODE1: NAME OF CODER

1. Mirlinda Ndrecka

CODE2: STUDY REJECTED

1. Study not rejected
2. No comparison group
3. Insufficient follow up
4. No recidivism outcome measure
5. Non offender sample
6. Data to compute ES not reported
7. Other _____

PUBLICATION INFORMATION

PUB1: TYPE OF PUBLICATION

1. Journal
2. Book
3. Report
4. Conference poster/presentation
5. Thesis/dissertation
6. Unpublished data
7. Online article
9. MISSING

PUBYR: YEAR OF PUBLICATION _____

PUBDEC: DECADE OF PUBLICATION

1. 1980
2. 1990
3. 2000
4. 2010

PUB2: DISCIPLINE OF SENIOR AUTHOR

1. Criminal justice
2. Economics
3. Education
4. Political science
5. Psychiatry/medicine
6. Psychology
7. Social work
8. Sociology
9. MISSING
10. Other _____

PUB3: AFFILIATION OF SENIOR AUTHOR

1. Academic institution
2. Government unit or agency
3. Program being evaluated
4. Research firm or consultant
5. Other _____
9. MISSING

PUB4: SOURCE OF FUNDING

1. Agency/organization
2. Federal/state/local government
3. Funded, unknown source
4. Other _____
9. MISSING

PUB5: LOCATION OF RESEARCH

1. Africa
2. Australia
3. Asia
4. Europe
5. North America
9. MISSING

SAMPLE DEMOGRAPHICS

TX_N: _____ Treatment group sample size

COMP_N: _____ Comparison group sample size

GEN1: GENDER OF SAMPLE ($\geq 80\%$)

1. Exclusively Male
2. Exclusively Female
3. Mainly Males
4. Mainly Females
5. Mixed
9. MISSING

GEN2A/GEN2B: % MALE _____ Tx _____ Comp

GEN3A/GEN3B: % FEMALE ____Tx ____Comp

RACE1: RACE OF SAMPLE (≥ 80%)

1. White
2. Black
3. Hispanic
4. Asian
5. Native
6. Mixed
9. MISSING

RACE2A/RACE2B: % BLACK ____Tx ____Comp

RACE3A/RACE3B: % WHITE ____Tx ____Comp

RACE4A/RACE4B: % HISP ____Tx ____Comp

AGE1: AGE OF SAMPLE (≥ 80%)

1. Adults
2. Mixed
9. MISSING

AGE2A/AGE2B: % ADULT ____Tx ____Comp

AGE3A/AGE3B: % JUVENILE ____Tx ____Comp

AGE4: MEAN AGE OF SAMPLE

MDO: MENTALLY DISORDERED OFFENDERS (≥ 80%)

1. Yes
2. No
3. Mixed
9. MISSING

MDOA/MDOB: YES ____Tx ____Comp

MSTAT: MARITAL STATUS OF SAMPLE (≥ 80%)

1. Married
2. Not Married
3. Mixed
9. MISSING

MSTATA/MSTATB: YES ____Tx ____Comp

EDU: HS DEGREE OF SAMPLE (≥ 80%)

1. Yes
2. No
9. MISSING

EDUA/EDUB: YES ____Tx ____Comp

RISK1: RISK LEVEL OF SAMPLE ($\geq 80\%$)

1. Author defined: low risk
2. Author defined: moderate risk
3. Author defined: high risk
4. Actuarial assessment: low risk
5. Actuarial assessment: moderate risk
6. Actuarial assessment: high risk
7. Author defined: Mixed
8. Actuarial assessment: Mixed
9. MISSING

RISK2: RISK LEVEL COLLAPSED

1. Low risk
2. Moderate risk
3. High risk
4. Mixed
9. MISSING

RISK2A/RISK2B: ____ Tx ____ Comp

RISK3: MEAN PRIOR RECORD FOR SAMPLE

RISK3A/RISK3B: ____ Tx ____ Comp

RISK4: HOW IS RISK DEFINED

1. Standardized risk assessment – 3rd generation
2. Standardized risk assessment – 2nd generation
3. Clinical
4. Criminal history only
5. Uses demographic info – author defined
6. Other _____
9. MISSING

RISK5: RISK MEASURE IF RISK4 IS CODED 1 OR 2

1. Instrument name _____
2. Risk4 is coded 3 or higher
9. MISSING

RISK6: WHEN IS RISK ASSESSED?

1. At screening/referral
2. At intake (within 2 weeks)
3. After intake (2 weeks or more post intake)
4. No formal process
9. MISSING

RISK7: IS RISK RE-ASSESSED?

1. Yes, clinical
2. Yes, actuarial
3. No – initial assessment but no reassessment
4. No – no initial assessment
9. MISSING

VHX: HISTORY OF VIOLENT OFFENSE (≥ 80%)

1. Yes
2. No
3. Mixed
9. MISSING

VHXA/VHXB: YES _____ **Tx** _____ **Comp**

SHX: HISTORY OF SEXUAL OFFENSE (≥ 80%)

1. Yes
2. No
3. Mixed
9. MISSING

SHXA/SHXB: YES _____ **Tx** _____ **Comp**

VCUR: CURRENT OFFENSE VIOLENT (≥ 80%)

1. Non violent
2. Violent
3. Mixed
9. MISSING

VCURA/VCURB: YES _____ **Tx** _____ **Comp**

TREATMENT/PROGRAM INFORMATION

TREAT1: TYPE OF CONTROL GROUP

1. No treatment
2. Declined/rejected
3. Withdrew/did not complete
4. Wait list
5. Minimal contact
6. Treatment as usual
7. Eligible but not referred
8. Regular probation/parole
9. MISSING
10. Historical
11. Mixed
12. Other _____

TREAT1A: CONTROL GROUP DESIGN

1. Random assignment
2. Statistical controls
3. Matching
4. Other
5. MISSING

TREAT2: OVERALL DURATION OF TREATMENT (IN WEEKS)

1. 1-3
2. 4-6
3. 7-9
4. 10-12
5. 13 or more
9. MISSING

TREAT3: FREQUENCY OF TREATMENT CONTACT

1. 3-4 times a week
2. 1-2 times a week
3. Less than weekly
9. MISSING

TREAT4: MEAN HOURS OF CONTACT PER WEEK

1. 1-2 hours per week
2. 3-5 hours per week
3. 6-10 hours per week
4. 11-20 hours per week
5. 21-30 hours per week
6. 31-50 hours per week
7. 51 or more hours per week
9. MISSING

TREAT5: MEAN TOTAL NR OF HOURS OF CONTACT

1. 1-10 hours
2. 11-20 hours
3. 21-40 hours
4. 41-100 hours
5. 101-200 hours
6. 200-1000 hours
7. 1001 hours or more
9. MISSING

PHASE1: MEAN HOURS OF CONTACT IN PHASE 1

1. 1-10 hours
2. 11-20 hours
3. 21-40 hours
4. 41-100 hours
5. 101-200 hours
6. 200-1000 hours
7. 1001 hours or more
9. MISSING

PHASE2: MEAN HOURS OF CONTACT IN PHASE 2

1. 1-10 hours
2. 11-20 hours
3. 21-40 hours
4. 41-100 hours
5. 101-200 hours
6. 200-1000 hours
7. 1001 hours or more
9. MISSING

PHASE3: MEAN HOURS OF CONTACT IN PHASE 3

1. 1-10 hours
2. 11-20 hours
3. 21-40 hours
4. 41-100 hours
5. 101-200 hours
6. 200-1000 hours
7. 1001 hours or more
9. MISSING

PROGTYPE: TYPE OF PROGRAMING OFFERED

1. TC substance abuse
2. TC work release
3. TC substance abuse and work release
4. Substance abuse only
5. Halfway house
6. Transitional/provisional employment
7. Provisional housing
8. Money vouchers/coupons
9. MISSING
10. Mental health services
11. Physical health services
12. Mixed/combination of services
13. Other
14. Work Release
15. Employment training/assistance
16. Reentry court
17. Family service
18. Mental health and substance abuse together

PRGPHASES: HOW MANY PHASES ARE IN THE PROGRAM?

1. 3 phases: (institutional, transitional and community)
2. 2 phase (institutional and residential)
3. Prison/jail only
4. Residential treatment in community only
5. Outpatient treatment in community only
6. 2 phases: residential in community and aftercare
7. 3 phases and aftercare
8. Mix of residential and outpatient treatment in the community

TREAT6a: TREATMENT TARGET

1. Family/marital
2. Employment/vocational
3. Emotional/personal orientation
4. Antisocial attitudes/cognitions
5. Antisocial associates
6. Substance abuse
7. Leisure activities
8. Personal distress (i.e., self esteem)
9. MISSING
10. Educational
11. Housing/homelessness
12. Mental health
13. Medical condition
14. Other non-criminogenic need _____

Record target of treatment by phase below:

PH1TREAT7A

PH1TREAT7B

PH1TREAT7C

TREAT6b: TREATMENT TARGET

1. Family/marital
2. Employment/Vocational
3. Emotional/personal orientation
4. Antisocial attitudes/cognitions
5. Antisocial associates
6. Substance abuse
7. Leisure activities
8. Personal distress (i.e., self esteem)
9. MISSING
10. Educational
11. Housing/homelessness
12. Mental health
13. Physical Health/condition
14. Other non-criminogenic need _____

Record target of treatment by phase below:

PH2TREAT7A

PH2TREAT7B

PH2TREAT7C

TREAT6c: TREATMENT TARGET

1. Family/marital
2. Employment/vocational
3. Emotional/personal orientation
4. Antisocial attitudes/cognitions
5. Antisocial associates
6. Substance abuse
7. Leisure activities
8. Personal distress (i.e., self esteem)
9. MISSING
10. Educational
11. Housing/homelessness
12. Mental health
13. Medical condition
14. Other non-criminogenic need _____

Record target of treatment by phase below:

PH3TREAT7A

PH3TREAT7B

PH3TREAT7C

TREAT7a: MODALITY OF TREATMENT

1. Cognitive/behavioral/social learning
2. Psychodynamic counseling
3. Group/milieu counseling
4. Family counseling
5. Therapeutic community
6. Vocational training
7. Client-centered therapy
8. Education-based
9. MISSING
10. Provisional employment
11. Eclectic
12. Housing placement
13. Housing assistance
14. Health services
15. Mental health services
16. Substance abuse client centered
17. Substance abuse cognitive behavioral
18. Relapse prevention
19. Parenting classes/program
20. Employment training
21. Supervision
22. Work release
23. Other _____

Record modality of treatment by phase below:

PH1MOD7A

PH1MOD7B

PH1MOD7C

TREAT7b: MODALITY OF TREATMENT

1. Cognitive/behavioral/social learning
2. Psychodynamic counseling
3. Group/milieu counseling
4. Family counseling
5. Therapeutic community
6. Vocational training
7. Client-centered therapy
8. Education-based
9. MISSING
10. Provisional employment
11. Eclectic
12. Housing placement
13. Housing assistance
14. Health services
15. Mental health services
16. Substance abuse client centered
17. Substance abuse cognitive behavioral
18. Relapse prevention
19. Parenting classes/program
20. Employment training
21. Supervision
22. Work release
23. Other _____

Record modality of treatment by phase below

PH2MOD7A

PH2MOD7B

PH2MOD7C

TREAT7c: MODALITY OF TREATMENT

1. Cognitive/behavioral/social learning
2. Psychodynamic counseling
3. Group/milieu counseling
4. Family counseling
5. Therapeutic community
6. Vocational training
7. Client-centered therapy
8. Education-based
9. MISSING
10. Provisional employment
11. Eclectic
12. Housing placement
13. Housing assistance
14. Health services
15. Mental health services
16. Substance abuse client centered
17. Substance abuse cognitive behavioral
18. Relapse prevention
19. Parenting classes/program
20. Employment training
21. Supervision
22. Work release
23. Other_____

Record modality of treatment by phase below

PH3MOD7A

PH3MOD7B

PH3MOD7C

TREAT8: LOCATION OF TREATMENT (WHOLE PROGRAM)

1. Prison only
2. Prison and Community based corrections facility
3. Prison and Community non-correctional facility
4. Community based correctional facility only
5. Community non-correctional facility only
6. Jail
7. Other_____
9. MISSING

TREAT9: FORMAT OF TREATMENT

1. Individual treatment
2. Group sessions
3. Client and family together
4. Mixed
5. Other_____
9. MISSING
10. Case management

Record format of treatment by phases below

PH1TREAT9

PH2TREAT9

PH3TREAT9

TREAT10: SETTING OF TREATMENT IN COMMUNITY

1. Residential
2. Outpatient
3. Mixed
4. MISSING

TREAT11: CJ PROVIDER OF TREATMENT

1. Yes
2. No
3. Mixed
9. MISSING

TREAT12: AFTERCARE

1. Yes
2. Provided but inconsistent
3. No
9. MISSING

TREAT13: TIME IN OPERATION AT EVALUATION

1. < 1 year
2. < 2 years
3. < 3 years
4. ≥ 3 years
9. MISSING

TREAT14: TREATMENT MANUAL

1. Yes
2. No
9. MISSING

TREAT15: TX MANUAL NAME IF TREAT15 IS YES

1. Name _____
2. Treat15 is no -- treat16 is n/a
9. MISSING

PROG1: MULTIPLE SITE PROGRAM

1. Yes
2. No
9. MISSING

VOLUNT: VOLUNTARY PARTICIPATION IN PRGRM

1. Yes
2. No
3. Mixed
4. Other _____
9. MISSING

CONSIST: DOES PROGRAM HAVE CONS. MODEL

1. Yes
2. No

FIDEL: WAS THE PROG. IMPLEM AS INTENDED

1. Yes
2. Minor inconsistencies, no impact on outcomes
3. Major inconsistencies, outcomes impacted
9. MISSING

COMPLTX: % COMPLETION TX GR.

COMPLCO: % COMPLETION IN CONTROL GR.

FOLLOW-UP INFORMATION

FOL1: LENGTH OF FOLLOW-UP (DISCHARGE)

1. < 6 months
2. 7-12 months
3. 13-24 months
4. 25-36months
5. 37months -5 years
6. > 5 years
9. MISSING

FOLTX: TX GROUP FOLLOWUP MEAN (MONTHS)

FOLCO: COMP. GROUP FOLLOWUP MEAN (MONTHS)

FOL2: FOLLOW-UP COLLAPSED

1. < 2 years
2. ≥ 2 years
9. MISSING

RECIDIVISM INFORMATION

RECID1: TYPE OF RECIDIVISM

1. Parole/probation violation
2. Re-arrest
3. Re-conviction
4. Re-incarceration
5. Contact w/court
6. Mixed
7. Other _____
9. MISSING
10. Any recidivism

RECID2: TYPE OF OUTCOME

1. General recidivism
2. Violent recidivism
3. Property offenses
4. Drug offenses
5. Sex offenses
6. Other _____
9. MISSING

RECID3: SOURCE OF DATA

1. Self-report
2. Official record
3. Other _____
9. MISSING

RECIDTX: Nr. TX group recidivated _____

RECIDCO: Nr. Comp group recidivated _____

RETXMEAN: Mean recid rate for TX group _____

RECOMEAN: Mean recid rate for comp group _____

RETXSD: Std. dev for TX mean _____

RECOSD: Std. dev for Comp. mean _____

OTHER OUTCOME MEASURES

OUTME1: OTHER NON RECIDIVISM OUTCOMES

1. Employment
2. Reduced substance abuse
3. Family reunification
4. Housing
5. Reduced mental health instances
6. Other _____

OUTME2: SOURCE OF DATA

1. Self-report
2. Official record
3. Other _____
9. MISSING

OUTMETX: Nr. TX group outcome _____

OUTMECO: Nr. Comp group outcome _____

OUTTXMEAN: Mean outcome rate for TX group _____

OUTCOMEAN: Mean outcome rate for comp group _____

OUTTXSD: Std. dev for TX mean _____

OUTCOSD: Std. dev for Comp. mean _____

STATISTICAL INFORMATION

STAT1: STATISTICAL TEST

1. ANOVA
2. Chi-square
3. Descriptive statistics
4. p value not otherwise specified
5. t-test
6. F-test
7. Regression
9. MISSING

STAT2: VALUE OF STATISTIC

R: EFFECT SIZE

NE: NR OF SUBJECTS IN E GROUP

NC: NR OF SUBJECTS IN C GROUP

NTOTAL: TOTAL NR OF SUBJECTS

METHODOLOGICAL QUALITY INDEX

METH1: REPRESENTATIVENESS OF SAMPLE

0. No
1. Yes

METH2: ADEQUATE DESCRIPTION OF SAMPLE

0. No
1. Yes

METH3: ADEQUATE DESCRIPTION OF METHODS

- 0. No
- 1. Yes

METH4: ASSESSMENT OF MULTIPLE OUTCOMES

- 0. No
- 1. Yes

METH5: OUTCOME REPORTED ON \geq 80% OF SAMPLE

- 0. No
- 1. Yes

METH6: STATISTICAL POWER

- 0. No
- 1. Yes

METH7: RATING OF INITIAL GROUP SIMILARITY

- 0. Nonrandomized design, comp group highly likely to be diff or known differences that are related to future recidivism
- 1. Nonrandomized design, comp groups have acknowledged diff
- 2. Nonrandomized design with strong evidence of initial equiv
- 3. Randomized design, large N or small N with matching

METH8: COMPARISON GROUP

- 0. Differences exist on important characteristics

_____ risk	_____ age
_____ sex	_____ race
_____ type	_____ education
_____ marital	_____ other
- 1. Differences exist unsure of impact
- 2. No differences on important factors

METH9: CONTROL GROUP

- 0. No
- 1. Yes

METH10: BLIND CODERS USED

- 0. No
- 1. Yes
- 9 MISSING

ATTRIT: PROBLEM (\geq 20% DROP OUT IN BOTH GR)

- 0. No
- 1. Yes
- 9 MISSING

APPENDIX B

Table B.1. Listing of Study Year, Effect Size and Sample N

Author	Year	r	N
Boufard & Bergeron	2006	-.02	177
Braga, Piehl, & Hureau	2009	.13	417
Butzin, Scarpitti, Nielsen, Martin, & Inciardi	1999	.28	462
Dowell, Klein, & Krichmar	1985	-.17	194
Duwe	2010	.11	269
Duwe	2011	.08	464
Duwe & Kerschner	2008	.14	2902
Duwe & King	2012	.18	548
Farole	2003	-.10	135
Farrell	2000	.00	79
Field	1985	.18	323
Fontaine, Gilchrist-Scott, Roman, Taxy, & Roman	2010	.11	239
Hall, Prendergast, Wellisch, Pattern, & Cao	2004	.25	180
Hamilton	2011	.04	951
Hamilton, Kigerl, & Hays	2013	.02	3237
Heilbrun, DeMatteo, Fretz, Erickson, Gerardi & Halper	2008	.11	417
Hiller, Knight, & Simpson	1999	.12	273
Inciardi, Martin, Butzin, Hooper & Harrison	1997	.33	227
Jacobs (full sample)	2012	-.03	1809
Jacobs (Chicago)	2012	.02	374
Jacobs (Detroit)	2012	-.04	426
Jacobs (Milwaukee)	2012	-.02	507
Jacobs (St. Paul)	2012	-.08	504
Jacobs and Western	2007	.09	896
Jengeleski & Gordon	2003	.08	530
Johnson & Larson	2008	-.01	1931
Kesten, Leavitt-Smith, Rau, Shelton, Zhang, Wagner, & Trestman	2012	.17	971
Knight, Simpson, Chatham, & Camacho	1999	.01	394
Knight, Simpson, & Hiller	1997	.23	220
Latessa, Lovins, & Ellefson	2007	.04	683
Latessa, Lowenkamp, & Bechtel	2009	-.08	7846
Lattimore, Steffey, & Visher	2010	.03	1697
Lindquist, Lattimore, Barrick, & Visher	2010	.11	357
Lowenkamp & Latessa	2002	-.06	6426
Markman, Fontaine, Roman, & Nadeau	2010	-.09	233
Martin, Butzin, Saum, & Inciardi	1999	.13	233
McKiernan, Shamblen, Collins, Strader, & Kokoski (Study I)	2013	.17	345
McKiernan, Shamblen, Collins, Strader, & Kokoski (Study II)	2013	.16	500
Prendergast, Wellisch, & Wong	1996	.39	41
Prendergast, Hall, Wexler, Melnick, & Cao	2004	.09	576
Redcross, Bloom, Jacobs, Manno, Muller, Seefeldt, Yahner, Young, Zweig	2010	-.04	1808
Redcross, Millenky, Rudd, & Levshin	2012	.05	977
Robbins, Martin, & Surrat	2009	.11	276

Table B.1. Listing of Study Year, Effect Size and Sample N cont.

Author	Year	r	N
Sacks, Chaple, Sacks, McKendrick ,& Cleland	2012	.35	127
Sacks, Sacks, McKendrick, Banks, & Stommel	2004	.35	107
Taylor	2013	.00	120
Turner & Petersilia	1996	.09	218
Van Voorhis, Spruance, Ritchey, Listwan, & Seabrook	2005	.05	468
Ventura-Miller & Miller	2010	.06	145
Wexler, DeLeon, Thomas, Kressel, & Peters	1999	.16	715
Wexler, Melnick, Lowe, & Peters	1999	.07	478
White, Saunders, Fisher, & Mellow	2012	-.03	1709
Wikoff, Linhorst, & Morani	2012	.19	280
Willison, Roman, Wolff, Corea, & Knight	2010	.05	617
Wilson & Davis	2006	-.10	622
Zanis, Mulvaney, Coviello, Alterman, Savitz, & Thompson	2003	.13	569
Zhang, Roberts, & Callanan	2006	.08	239919
Zweig, Yahner, & Redcross	2010	.05	977