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## Evidence-Based Programming During Post-Conviction Supervision and Recidivism Outcomes

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# Walden University

College of Social and Behavioral Sciences

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Vanessa L. Starr

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Walden University  
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Abstract

Evidence-Based Programming During Post-Conviction Supervision and Recidivism

Outcomes

by

Vanessa L. Starr

MA, DeSales University, 2015

BA, Penn State University, 2002

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

May 2021

## Abstract

Recidivism plagues the criminal justice system, specifically, in the field of community corrections; therefore, it is a societal concern. The goal of community supervision is the successful reintegration of offenders and the reduction of recidivism. The purpose of this quantitative correlational study was to determine the efficacy of evidence-based programming in a district in the northeastern United States to examine recidivism among federal offenders to fill a gap in the literature on real-life applicability. The risk-needs-responsivity model was the theoretical framework for this study, based on contemporary associations with evidence-based practices within judicial and correctional agencies. The statistical information for this study came from secondary data collected from the Probation and Pretrial Services Automated Case Tracking System. The data were analyzed using a MANOVA to test the significance, if any, between the dependent variables and the independent variable. The results of the MANOVA provided an understanding of the correlation, if any, that could exist between evidence-based programming and recidivism while controlling for the Post-Conviction Risk Assessment. Based on the results, the null hypothesis was rejected. The results showed an inverse relationship contradictory to the supporting literature on evidence-based programming, which can be considered a pivotal starting point for further research on this topic. Implications suggest that future research go beyond the black box model to consider additional factors and not limit the scope of the study to outcomes. Developing an understanding of the implications of evidence-based programming provides a meaningful opportunity to decrease recidivism thus creating community focused positive social change.

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## Dedication

This dissertation is dedicated to Jeff, Madison, and Mason for always believing and encouraging me to be my best self... Starr's never quit!

## Acknowledgments

To my family, Jeff, Madison, Mason, Mom, Dad, Veronica, and Victoria, for surviving this long journey, sharing in my dream, and never letting me quit. This would not have been possible without all of you. To my friends for their words of encouragement. Your words made a difference.

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## Chapter 1: Introduction to the Study

In September 2020, the Administrative Office of the U.S. Courts (2020) released the annual report for the current costs of community supervision, detention, and imprisonment for the federal system showing significant cost savings, \$96 per day, when comparing imprisonment with community supervision. Given the substantial amount of monetary savings provided by community supervision, there is an even greater reason for practitioners to seek new methods of successful supervision practices. Such practices would result from current research based on the best available data to guide policy and practices to improve or achieve desirable outcomes for former prisoners (National Institute of Corrections, 2017). Community supervisors within the federal system have adopted this programming centered on core correctional practices that adhere to the risk-needs-responsivity (RNR) model to produce reductions in recidivism.

In Chapter 1, I outline the background, problem, and purpose of the current study. The research question and corresponding hypotheses are also provided. The RNR model, the theoretical framework, is detailed, and its relevance to the current study is explained. After several operational terms are defined, I describe assumptions, scope and delimitations, and limitations as well as how the significance of the study might hold practice, theory, and positive social change implications regarding evidence-based practices to prevent recidivism.

### **Background of the Study**

In the United States, the practice of individuals convicted of breaking the law resulting in community supervision dates as far back as 1841 (Clear et al., 2018). This

groundbreaking precedent occurred in Massachusetts with John Augustus, a government employee given the custodial rights of a convicted offender by the Court; thus, commencing community supervision and the role of a probation officer (Bayens & Smykla, 2012). Community supervision is the supervision of individuals in the community, based on the Court's order, after being convicted of a crime. While community supervision dates back to 1841, it was not until 1925 that the National Probation Act was signed, establishing the U.S. Federal Probation Service. The nature of future sentencing regarding parole for federal offenders changed in the 1980s, eliminating parole for future sentencing with the Comprehensive Crime Control Act of 1984 (Hoffman, 2003). Thus, community supervision officers for federal offenders are known as U.S. probation officers. Those on state and local levels are generally known as parole officers or state parole agents.

The challenge of reducing recidivism is one that continues to plague the field of community corrections. Currently, rates of incarceration and community supervision are on the decline (Bureau of Justice Statistics, 2018). While this decrease shows promise, there is still much work to be done. The corrections field strives for research that produces more effective programming methods to continue this downward trend. Gendreau et al. (2010) identified eight criteria for effective case management in community supervision, including core correctional practices: antirisk modeling, effective reinforcement, effective disapproval, effective use of authority, structured learning, problem-solving, cognitive restructuring, and relationship skills. With this study, I hoped to demonstrate, along with the work of other researchers that will be

further discussed in the literature review, the importance of utilizing core correctional practices as the foundation of evidence-based practices and employing them with fidelity in community supervision.

In 2011, the U.S. Probation Office of a district in the northeastern United States began the implementation of evidence-based programming in the supervision practices and case management of those being supervised jurisdictionally, which incorporated programs such as Staff Training Aimed at Reducing Re-arrest (STARR), Thinking for a Change (T4C), and Interactive Change journals. The evidence-based programming used is foundationally based on core correctional principles focusing on addressing the criminogenic risk and needs of the offender population. I conducted this study to explore if the implementation of and exposure to evidence-based programming during the supervision for federal offenders in this district in the northeastern United States has positively correlated to reducing recidivism.

The Post-Conviction Risk Assessment (PCRA) tool is the instrument used by the U.S. Probation Office to determine the level of risk for the offender while on supervision (Lowenkamp et al., 2015). The risk score is fluid and changes as factors within the offender's life change, and reassessment occurs throughout supervision. The risk levels are high, moderate, low-moderate, and low; however, they are not the only factors of significance from the PCRA. Additionally, the interpretation report of the PCRA provides data related to evidence-based practices and guidance on what needs to be addressed during the term of supervision. The interpretation report from the PCRA also presents the offender's dynamic risk factors, criminal thinking styles, responsibility

factors, and a violence assessment category—all of which provide data following the RNR model. Because there is little research examining the effectiveness of evidence-based programming on reducing recidivism (Lowenkamp et al., 2012), the results of this study may help to determine if there is a significant correlation between this evidence-based programming exposure and recidivism for supervised federal offenders when controlling for PCRA scores.

### **Problem Statement**

The Bureau of Justice Statistics (2018) reported 6,410,000 people under community corrections in the United States. Community corrections are the supervision of convicted individuals released from incarceration or sentenced to probation. Parole officers assist with the successful reintegration of offenders returning to the community while ensuring community protection. These services help to reduce the ever-growing cost of U.S. tax dollars, which are spent on the results of crime. Often, the success of community corrections is measured by the rate of reduction in recidivism, which can have complex results.

The general problem was that reducing recidivism is challenging and does not have a concrete or simple solution. It is problematic for correctional professionals because it is measured by quantifying a recidivism factor based on human behavior. Essentially, the problem is trying to alter or control human behavior, leading former convicts to think differently, make better choices, and change their criminality. Recidivism is a concern of society because its impact is not only in the crimes committed but also the financial burdens that they place on the U.S. tax dollars, such as legal costs,

property damage, medical treatment, development of correctional institutions, and the increased need of law enforcement. The specific problem was to determine whether the programming utilized in a district in the northeastern United States has a substantial impact on the population served.

Minimal amounts of literature support how programs impact recidivism, perhaps because evidence-based programming in the community corrections system is relatively new—the implementation for the federal system began roughly in 2009 (Robinson et al., 2011). The importance of this study lies in adding to the literature related to the results of evidence-based programming and providing insight into the work of probation officers as agents of change who use evidence-based programming to assist offenders with the reintegration process. The evidence-based programming for the U.S. Probation Office of a district in the northeastern United States comprises several programs, including STARR, interactive journaling, and T4C. In this study, I explored if evidence-based programming alters recidivism, answering a problem faced by the community corrections field.

The problem of recidivism requires ongoing evaluation to derive the best method for addressing the plan to match needs. Robinson et al. (2011) have shown core correctional practices and cognitive-behavioral treatment, which follow the RNR model, are research-based methods needed to assist offenders in the reintegration process, addressing recidivism. While there is significant research supporting the implementation of evidence-based programming, there is a gap in the literature examining the effectiveness of such programming on reducing recidivism (Lowenkamp et al., 2012).



Therefore, there was significant value in conducting this study to understand how to approach recidivism and the implementation of programming that effectively accomplishes the mission of community safety. All factors align with the successful reintegration of federal offenders and the importance and the purpose of this study.

### **Purpose of the Study**

The purpose of this quantitative, nonexperimental, correlative study was to explore the efficacy of evidence-based programming to fill a gap in the literature on its real-life applicability. Consequently, filling this gap in the literature could help to determine the likelihood, if any, of the recidivism of federal offenders under the supervision of the U.S. Probation Office of a district in the northeastern United States. The Administrative Office of the U.S. Courts (2018) defined evidence-based practices as the use of the best practices and informed decisions in the supervision of individuals and the development and design of policies to achieve maximum reduction in recidivism.

### **Research Question and Hypotheses**

The independent (IV) and dependent (DV) variables are terms used to describe the study's properties that are tested and measured. The IVs are the properties that the researcher controls, and the DVs change due to the IV. The following research questions and corresponding hypotheses guided this study:

RQ: What is the relationship between the recidivism of federal offenders exposed to evidence-based programming (i.e., Group A) compared to the recidivism of federal offenders not exposed to evidence-based programming (i.e., Group B) as measured by their PCRA scores?

*H*<sub>0</sub>1: There is no statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by their PCRA scores (i.e., the DV).

*H*<sub>a</sub>1: There is a statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by their PCRA scores (i.e., the DV).

### **Theoretical Foundation**

The theoretical framework of research is essential to provide a platform for research that describes, explains, and can potentially predict a phenomenon (Jenkins-Smith et al., 2014). I used the RNR model, by Andrews et al. (1990), as the theoretical framework for this study based on the applicability of its contemporary associations with evidence-based practices within judicial and correctional agencies attempting to pursue their implementation. Rojas and Peters (2016) used the RNR model and the social learning model in a study of co-occurring disorders among offender populations. RNR helps in applying evidence-based practices, like cognitive behavioral therapy, and such evidence-based treatments have significantly decreased recidivism and helped with offenders' successful transition to productive citizenry (Rojas & Peters, 2016). The foundation of the RNR model is various core risk principles, including thinking, negative peers, criminal attitudes, substance abuse, unemployment, family issues, unproductive leisure skills, and poor education, which the model can help to address (Rojas & Peters, 2016).

This theory assists in providing a more in-depth and transparent understanding of the progress of implementing evidence-based programming as a policy within a law enforcement department. The goal of this study was to determine if, or to what extent, evidence-based programming has impacted recidivism by aiding community corrections in reducing recidivism through policy change with the implementation of evidence-based programming in the case management supervision of federal offenders. The RNR model aligned with the current study because the model is based on the risks of recidivism, the needs of both offenders and law enforcement agents to encourage permanently turning away from crime, and the responses to aid in reducing recidivism. A more in-depth explanation of the theoretical framework is presented in Chapter 2.

### **Nature of the Study**

In this study, I used a quantitative, nonexperimental, correlative method based on a correlation design and utilizing the statistical data on the recidivism rate of offenders by comparing two values: those that have had exposure to evidence-based programming against those that have not. The data used in this study were derived from the Probation and Pretrial Services Automated Case Tracking System (PACTS) with a chi-square test of significance while controlling for the PCRA score. The data were categorized by risk level and exposure to evidence-based programming.

The data were analyzed to determine the efficacy of evidence-based programming and if there was a reduction in the recidivism rate for those that had exposure to the programming. Use of this method aligned with the research question and the rationale for conducting the study. My expectation was that the results would indicate that evidence-

based programming has reduced the recidivism rate and aided in the successful reintegration of federal offenders.

### **Definitions**

*Cognitive-behavioral treatment:* Treatment focused on problem-solving interventions intended to change an individual's way of thinking (Bayens & Smykla, 2012).

*Community corrections:* Correctional agencies charged with the supervision of offenders in the community at all levels of government whether local, state, or federal.

*Core correctional practices:* Created in 1980 by Andrews and Kiessling, focusing on five dimensions that utilize appropriate use of authority, modeling and reinforcement, skill-building and problem solving strategies, effective use of community resources, and relationship factors (Dowden & Andrews, 2004).

*Criminogenic needs/risk factors:* Factors that influence an individual committing a crime (Chenane et al., 2015).

*Dynamic risk factors:* Factors that impact a person's recidivism rates, such as cognition, social networks, education/employment, and drugs/alcohol (Lowenkamp et al., 2015).

*Evidence-based programming:* Programming that was developed based on core correction practices, including STARR, T4C, and interactive journaling.

*Interactive journaling:* Journals made by the change company that focus on several domains that address criminogenic needs.

*Offender*: An individual convicted of breaking the law and are active in community supervision (Bayens & Smykla, 2012).

*PCRA*: The assessment instrument used by the U.S. Probation Office to assess the offender's risk level (Lowenkamp et al., 2015).

*Probation or supervised release*: A period that an offender serves in the community under the Court's conditions.

*Recidivism*: Refers to a person's relapse into criminal behavior, measured by criminal acts that resulted in re-arrest, reconviction or returned to prison (National Institute of Justice, 2008).

*Revocations*: A term of supervision, including probation, parole, or supervised release, revoked for new criminal activity or for violating supervision conditions, commonly referred to as technical violations (Johnson, 2014).

*RNR model*: A model based on the on the cognitive learning theory and the offender's risk level (Bayens & Smykla, 2013).

*STARR*: A program created by the Administrative Office of the U.S. Courts to train staff based on evidence-based programming (Robinson et al., 2011).

*T4C*: A program based on cognitive behavioral therapy and used as an intervention in case of management during supervision.

### **Assumptions**

Assumptions are accepted as truths by researchers, or the researcher speculates them as truthful without actual evidence (Marshall & Rossman, 2016). The initial assumption for this study was that the data would accurately reflect a reduction in

recidivism based on exposure to evidence-based programming, which could not be proven until the data were examined and categorized to determine the impact on recidivism, if any. The assumption that evidence-based programming was administered accurately was crucial because it was an instrumental factor concerning the analysis of the recidivism rate of federal offenders.

### **Scope and Delimitations**

Researchers use delimitations to limit the study's scope where the participants and the location of the study have parameters (Kirkwood & Price, 2013). To examine federal offenders' recidivism after exposure to evidence-based programming, I used a quantitative methodology aligned with a research question that compared two equal groups based on their exposure to the programming to determining if the exposure impacts recidivism. The scope of this study consisted of examining the recidivism rate of all federal offenders beginning with the fiscal year (FY) of 2012 through 2019 and categorization based on risk level. I began with 2012 because evidence-based programming only began implementation within the district in 2011. The data for 2020 were not completed. One limitation of this study was the use of secondary data retrieved from the PACTS, the only database used. All identifying information and characteristics have been removed per the instructions of the Walden University Institutional Review Board (IRB).

### **Limitations**

One limitation of this study was the use of a nonexperimental, correlational method because there was no capability to create a control group for exposure to

evidence-based programming. Additionally, there was no way to control for dosage, essentially the amount of exposure to evidence-based programming received by each offender, which made it difficult to determine the exact dosage amount. Finally, there was not a way to ensure program implementation fidelity, which had the potential to impact the results on reducing recidivism significantly.

### **Significance of the Study**

In this study, I quantitatively examined the relationship between exposure to evidence-based programming and the recidivism rates of federal offenders. This research has the potential to assist in the future decision making of law enforcement and community correction professionals related to evidence-based practices, whether it is for additional funding for evidence-based programming, evidence-based training for officers, or even to promote the need for additional officers on staff.

### **Significance of the Theory**

The analysis and results of this study provide information on evidence-based programming in a real-world application while controlling for the risk level. The first step was examining federal offenders' recidivism rates under an RNR framework after they have been categorized by risk level and their exposure to evidence-based programming. Because evidence-based programming is implemented to address criminogenic risk and needs and reduce recidivism, I examined the recidivism rate to determine if the programming is producing the desired results.

**Significance to Practice**

All community corrections levels utilize a risk-based supervision process; this process determines the appropriate level of offenders' supervision based on their risk and needs, affording them with a meaningful opportunity for change while ensuring community safety. The results of the current study will assist in defining to what extent evidence-based practices and programming have, if at all, impacted recidivism and risk level. Furthermore, the results of this study, as a piece of evidence-based research on recidivism focused on the federal system, add to the literature in a field of study that is lacking research on this specific topic. Additionally, the findings should have applicability to all community supervision agencies across the country by encouraging the further implementation of evidence-based programming and affecting change by creating an even greater reduction in recidivism and, therefore, reducing crime, which could help lead to greater safety and security in society overall.

**Significance to Social Change**

This study demonstrates the continued need for social change as it relates to programming to develop an understanding as to the impact recidivism outcomes. Programming that producing a noticeable impact on recidivism outcomes, not only serves the participants but society. Furthermore, the results encourage the need for adjustments to the implementation of evidence-based programming to increase success. They can also support targeting offender supervision based on the individual's risks and needs (see Andrews & Bonta, 2006). Moreover, the results can be used to illustrate the progression of supervision from an environment of controlling strategies to one incorporating



evidence-based programming, utilizing controlling and correcting strategies to increase success by reducing recidivism and increasing the amount of time offenders spend in the community living a crime-free life.

### **Summary and Transition**

In Chapter 1, I provided a summation of the purpose and intent of this study, which was to examine the impact of evidence-based programming on federal offenders' recidivism in the U.S. probation office in the northeastern United States. While recidivism is of great concern in the corrections field, it is not only their concern but also one of the general public because the impact of recidivism is felt throughout society. A reduction in recidivism is not only beneficial to community corrections as validation of job performance and public safety, but increasing public safety is an immeasurable benefit, especially in its potential to decrease crimes.

In Chapter 2, I provide a comprehensive review of the relevant literature and establish the foundational framework for this study. Moreover, along with the literature reviewed, I will discuss the rationale and need for conducting this study.

## Chapter 2: Literature Review

Reducing recidivism is problematic and does not have a concrete or straightforward solution. The reason this issue is problematic for correctional professionals is that success is measured by quantifying a recidivism factor based on human behavior and trying to alter or control human behavior to reduce criminal behavior. This can be accomplished by helping the offender to understand that thinking differently ultimately leads to making better choices and, thus, changing their criminality. Recidivism is society's concern because the impact is not only a reduction in the crimes committed but also the financial burdens placed on U.S. tax dollars, such as legal costs, property damage, medical treatment, development of correctional institutions, and the increased need for law enforcement.

The purpose of this study was to determine the efficacy of evidence-based programming to fill the gap in the literature on its real-life applicability. Consequently, bridging this gap could help to determine the likelihood, if any, of the recidivism of federal offenders under the supervision of the U.S. Probation Office of a district in the northeastern United States. Researchers have documented the promise of core correctional practices and the RNR model as areas in the criminal justice system that assist in the supervision of offenders, thus helping combat recidivism. In this chapter, I examine the current literature on the implementation trends and outcomes of evidence-based programming.

### **Literature Strategy**

In Chapter 2, I examine the concepts surrounding the problem of recidivism via a synthesized analysis of research from peer-reviewed and published criminal justice, government, and psychological journals. Several criminal justice textbooks were also a critical component of developing the necessary research literature for this study. The development of this literature review involved various book purchases and internet-based searches of databases accessible through the Walden University Library. Keyword terms used to search for literature included *cognitive behavioral treatment*, *core correctional practices*, *criminogenic needs*, *evidence-based programming*, *recidivism*, *risk-needs-responsivity model*, and a combination of these words with *offender* and *recidivism* included as well as other combinations of these terms.

### **Theoretical Foundation**

Over the last 4 decades, criminal justice researchers have continued to explore supervision practices and techniques as to the effectiveness of interventions. This type of research has resulted in validating results associated with core correctional practices and the RNR model supporting evidence-based research. The theoretical foundation and framework for this study was the RNR model of Andrews et al. (1990).

#### **The RNR Model Framework**

Reducing recidivism not only has relevance to public safety but also implications for the cost benefits related to incarceration and criminal justice fees. To reduce recidivism, there first needs to be identification of the factors that increase recidivism and then those that would reduce it. The field of community corrections is rife with research

emphasizing the RNR model (Polaschek, 2012). The RNR model originated in Canada in the 1980s and 1990s and was formalized by Andrews et al. when the consensus about rehabilitation was that nothing that was done was working (Ward & Maruna, 2007). The primary focus of this subsection is on the RNR model and the foundational theory supporting it.

The RNR model is based on a theory supported by principles conducive to rehabilitation. Using the RNR model and its principles by applying them to practice can provide positive results (Landenberger & Lipsey, 2005). Researchers have shown that further development of the RNR model gives an extensive foundational basis of the model and effective implementation strategies. According to Taxman (2014), the RNR model is the main framework used by judicial and other agencies implementing evidence-based practices.

### **The Risk Principle**

The first R of the RNR model represents the risk factors impacting the individual's ability for success that vary in degrees, suggesting that higher risk requires a higher dosage of services to address issues (Lowenkamp & Latessa, 2004; Lowenkamp et al., 2006). Assessing the individual's risk is paramount to the supervision process because it dictates the level of appropriate supervision and the risk to the community. Those risk factors are specifically detailed as cognitions, social networks, education/employment, and alcohol/drugs.

To address this risk principle, it is recommended that an increase in dosage is based on the higher risk the offender scores (VanBenschoten et al., 2016). Significant

data has demonstrated that over supervision and overdosage of treatment for a low-risk offender does more harm than good, essentially increasing recidivism (VanBenschoten et al., 2016). Cohen et al. (2016) examined the implementation of a low-risk supervision policy within the federal system, concluding there was no compromise in community safety after policy implementation and demonstrating the need to base efforts on high- and moderate-risk offenders because the need is greater and will produce a more significant result.

Bonta et al. (2000) looked at intensive supervision and found higher-risk offenders receiving more intense supervision had a 20% reduction in recidivism, and for lower-risk offenders, a 17% increase. Another example of the benefits of adhering to the risk principle was a meta-analysis conducted by Andrews and Dowden (1999) in which programming reduced recidivism by 19% while those that violated the risk principle increased recidivism by 4%.

Ward and Maruna (2007) categorized risk factors into two conceptualizations: dynamic or static. The latter are factors that cannot be changed (e.g., no intimate relationships, previous offenses, and a tendency to commit crimes). Some stable risk factors classified as dynamic are usually stable but can change, like functioning socio-affectively, self-sexual regulation, and general self-regulation. Dynamic risk factors classified as acute can fluctuate and change depending on the circumstances, including the state of mind and substance abuse, which can set off an offense (Ward & Maruna, 2007).

## **The Need Principle**

The N in the RNR model represents the need principle, which targets the dynamic risk factors or criminogenic needs of the offender (Andrews et al., 1990). Researchers have shown that identifying the risk level followed by determining the needs and then targeting both increases the ability to reduce recidivism and the propensity for criminal behavior (Andrews & Bonta, 2006, 2017; Andrews et al., 1990; Bourgon et al., 2018). Looman and Abracen (2013) reiterated the eight factors of need first outlined by Andrews and Bonta (2010): (a) antisocial behavior history with early participation in antisocial places and activities, a strength when not present; (b) patterns of antisocial behavior that involve seeking pleasure and little care for other individuals along with good self-control and management of anger, the treatment target being to strengthen the positive skills; (c) antisocial cognition that includes a penchant for criminal activities due to negative belief and values; (d) associating with antisocial people and not socializing with prosocial people, thus having bad influences; (e) a negative home background whether from childhood or a bad marriage; (f) trouble at work or school; (g) little or no positive recreational activities; and (h) abuse of drugs and alcohol.

The criminogenic needs consistent with the factors that increase recidivism include cognitions, social networks, employment/education, and alcohol/drugs (Andrews & Bonta, 2001). Gendreau et al. (2002) found that programs that targeted more criminogenic needs strongly related to the effectiveness in reducing recidivism; on average, about 30% of a program targeted four to six criminogenic needs.

Research has shown intervention-based services providing opportunities for the offenders to role-play high-risk scenarios and develop prosocial cognitive skills are essential in addressing risks and needs (Alexander et al., 2014; Bourgon et al., 2018). Often those interventions include instruction of the cognitive model and problem-solving. The interventions are used throughout the entire supervision process and are either introduced proactively, with no current problem to address, or reactively, to address a problem or issue at that moment.

### **The Responsivity Principle**

The final R of the RNR model represents the responsivity principle that focuses on tailoring interventions based on behavioral, cognitive, and psychosocial functioning; risks; needs; and the social learning theories of the individual offender (Andrews & Bonta, 2010; Dowden & Andrews, 2004; Gendreau, 1996). Responsivity is closely related to programming versus recidivism because its goal is to increase the receptivity of offenders to the process. The focus is to match the services to address the individual needs of the offender. There are two kinds of responsivity as it applies to the RNR model: general and specific. In the general responsivity, the most effective interventions are behavioral, cognitive, and social learning. While in specific responsivity, the treatment must meet the criminogenic needs and the address issues specific to the individual's case for them to get the most out of the treatment (Looman & Abracen, 2013).

## Literature Review

While conducting an extensive search for this study, the one area that showed a gap in current literature was the implementation and outcomes of evidence-based programming. A gap in the literature, such as this, further solidified the need to conduct the current study to produce research that examines the impact of evidence-based programming on recidivism. However, my search did produce an abundance of literature on criminogenic needs, RNR, and core correctional practices. Although some of the literature in these subject areas is dated, it was necessary to include because of the historical significance.

According to the Administrative Office of the U.S. Courts, recidivism is defined as “a return to crime by those who have either served a term of supervised release or probation” (Johnson, 2017, p. 52). Johnson (2017) expounded upon the difficulties in addressing recidivism in the criminal justice system and potentially the greatest challenge by stating that the effort of community corrections to reduce this rate is to attempt to control or alter human behavior. While the definition of recidivism differs according to the level of government and even among different researchers, most agree that criminogenic needs have a significant impact on recidivism (e.g., Andrews & Bonta, 2001; Robinson, 2018).

Criminogenic needs, originally developed by Andrews and Bonta (2001), include antisocial cognitions, antisocial networks, employment, and substance abuse. Addressing human behavior begins with developing an understanding of the predictors to criminal offending, which are the criminogenic needs. The concept of evidence-based



programming is built on core correction practices (Dowden & Andrews, 2004). The federal system has chosen to address this problem through the implementation of evidence-based programming. Although evidence-based practices are not theoretically new, they are still in the infancy stages in the federal system because implementation began within the last 10 years.

The last decade has brought upon meaningful change throughout the federal system with the implementation of the PCRA and STARR (Robinson, 2018). Both the PCRA and STARR have important roles in the supervision process, and the PCRA is the assessment instrument used to determine the risk level and criminogenic needs of the offenders. STARR is utilized in the supervision process and based on core correctional skills.

### **The PCRA Instrument**

The PCRA is an instrument studied and determine to be valid as an assessment instrument in determining risk; several studies have shown its success and significance in determining supervision outcomes (Johnson et al., 2011; Lowenkamp et al., 2016; Cohen & Bechtel, 2017; DeLisi et al., 2018). The study by Lowenkamp et al. (2016) demonstrated important information regarding the PCRA, which is a risk instrument used solely in the federal system. The PCRA is, however, similar, comparable, and even superior to predictability accuracy to other risk assessment instruments used in other government systems. Some of the other risk instruments used include the level of service/case management inventory, the correctional offender management profile for

alternative sanctions, and the Ohio risk assessment system, all of which are responsible for assessing and managing offender supervision with a score.

In general, risk assessment instruments have seen a series of evolution from the first generation based solely on professional judgment and intuition to instruments like the PCRA that is a fourth-generation instrument (Johnson et al., 2011). The PCRA uses various information, some of which is static, meaning it does not change, such as criminal history. However, it also considers other information that is dynamic factors that can change, such as education and employment, social networks, familial support, living situations, and the use of drugs and alcohol. The actual assessment comprises two sections one that is completed by the offender that is an 80-question questionnaire, and a section completed by the officer covering many domains regarding the offender that includes criminal history, education/employment, alcohol/drugs, social networks, cognition, and violence. There is also additional information inputted that addresses responsivity factors, including things such as language barriers, childcare, homelessness, transportation, abuse, and intellectual capacity, to name a few. After all of this information is inputted, an output report is produced, showing the risk score for the offender and the dynamic risk factors and any responsivity factors that need to be addressed while on supervision.

### **Recidivism**

The focus of this section is on the concept of recidivism. It will include the definitions, the measurement, and the approach to reduce recidivism. Often defining recidivism can be difficult because it differs from agency to agency or research,

depending on the study. The purpose of this part of the chapter is to provide detailed background information on recidivism and to highlight gaps while showing insight and the need for the current study. The definition of recidivism varies from study to study, depending on the researcher and the evaluation process's data. For this study, recidivism was measured as an arrest occurring during the term of supervision either for a new law violation or of a technical nature.

### *Defining recidivism*

Baynes and Smykla (2013) defined recidivism as a measure of returning to criminal activity, referring to re-arrest, reconvictions, and re-incarceration but those who return to criminal behavior after a previous period of crime or underwent a sanction punishment. Not only is recidivism measured by new law violations, but it may also be the subsequent arrest or incarceration of an offender for technical, non-new law violations, arrests during a term of supervision. In other words, a technical violation would include positive drug screens, failure to complete treatment, absconding, failure to maintain employment, or any non-compliance of conditions required by the Court on the conditions of supervised release.

Recidivism for this study examined federal offenders while on supervision from 2012 until 2019. The groups will be categorized by risk-level, which will be further discussed in later sections addressing risk and the assessment used to determine and validate the risk levels. The recidivism rate of offenders in this study was those exposed to evidence-based programming against those that did not have exposure. Evidence-based

programming exposure, as previously defined in Chapter 1, was those offenders who were exposed to STARR, T4C, and interactive journaling.

### *Measuring recidivism*

Butts and Schiraldi (2018) noted that there is substantial debate on using recidivism as a measure of outcomes for the field of corrections because such a measurement is believed to be harmful because it reinforces an underlying racial and class bias. It is also their belief that community corrections should rely on criminal desistance and the social integration of offenders. Another concern is the bureaucratic process involved in charging an individual with an inherently immeasurable crime as a factor but a significant factor in recidivism (Butts & Schiraldi, 2018). In many cases, the recidivism measure for researchers may draw on several decades of research to determine the applicability to work at hand.

The purpose of this research, the outcome of recidivism, will only examine a few factors, including supervision, risk level, and evidence-based exposure, all in one district or geographical area. There will be no concentration on examining race, age, gender, or economic status of the offenders in this study. An interesting fact presented by Butts and Schiraldi (2018) is that the individual's resources or attitudes may impact the criminal justice system; specifically, this relevance is huge because social injustice is plaguing our country given societal and personal biases.

### **Factors Increasing Recidivism**

This section will discuss the factors related to an increased recidivism role, such as cognition, social networks, employment/education, and alcohol/drugs. The

criminogenic factors listed are not presented in any specific order, for each factor has particular importance and significance. The criminogenic factors can impact either individually or cumulatively as a matter of criminogenic need (Andrews & Bonta, 2001). It is crucial to understand each factor of the criminogenic needs to comprehend the potential it has in the process. These factors have applicability not only to the criminal justice population but also to all individuals.

### *Cognitions*

Cognitions are the thoughts that control individual behavior or criminal social identity or thinking style (Bourke et al., 2013). For offenders, it is the antisocial cognitions that require addressing. Individual thoughts are what controls behavior, regardless of whether they result in positive or negative outcomes. Antisocial cognitions often lead to criminal acts, resulting in the incarcerated individual (Bourke et al., 2013). Research demonstrates that an individual's peers, who will be discussed later in the chapter, often influence a person's thinking (Wooditch et al., 2014).

Many researchers conclude that antisocial cognitions increase an individual's chance of recidivism. The increased faulty thoughts contribute to criminality (e.g., Wright et al., 2012; Miura & Fuchigami, 2017). Such antisocial cognitions include the behavior, value, and attitudes believed to be predictors of cognitions, including the criminal lifestyle on recidivism (Boduszek et al., 2013). Antisocial cognition refers to the thoughts and criminal behavior outside of current societal norms and results in criminality (VanLeeuwan et al., 2014). Significant research exists concluding a correlation between recidivism and criminal thinking (e.g., Leutgeb et al., 2015);

therefore, a means of addressing this concern is core correctional practices as a means of intervention. The intervention focuses on restructuring thoughts by providing instruction of the cognitive-behavioral model for offenders used to address their antisocial thinking and to provide a new thinking report to adjust maladaptive thinking.

Significant work in this domain over the years has produced data by researchers such as Speigler and Gueveremont (2010) and Akers et al. (1968), which explains cognitions and crime, including the correlation with thinking styles such as proactive and reactive. Much of the research has expounded on cognitions specifically related to evidence-based programming, which explains that cognitive-behavioral interventions, cognitive restructuring, and problem-solving focusing on the process of thinking control behavior (Rojas & Peters, 2016; Davis et al., 2015). Understanding the research on this topic provides an understanding of the correlation between cognition and other criminogenic factors.

### *Social networks*

Social networks are the individuals a person spends time with; this only becomes a concern for offenders if the social network is antisocial. Antisocial networks comprise individuals who engage in behavior that support criminality, increasing the likelihood that the offender will re-offend (Bushway & Appel, 2012). There is a strong correlation for reoffending for those who continue to have relationships with antisocial peers, outweighing many other factors like job opportunities and friendship (Wooditch et al., 2014).

Social networks are a strong indicator of behavior. The relationship creates bonds by engaging in a similar activity rooted in social learning theory (Burgess & Akers, 1968). This theory is true for humans because behavior is learned and reinforced by what is seen and learned. The importance of this theory is even greater when there are rewards connected with the learning providing the necessary reinforcement to continue the behavior, whether it is positive or negative.

Social learning theory supports the evidence of factors impacting the social learning process for people under supervision, such as in social learning programs (Weinrath et al., 2015). In reviewing the research and the applicability when examining the offender population, there are some crucial components, which include the implementation of a condition of supervised release that has a requirement of no contact with known convicted felons, which minimizes the amount of antisocial networking (e.g., Taxman, 2008).

Additionally, recognizing the importance of prosocial modeling conducted by the interactions between the officers and the offenders creates an environment that provides prosocial learning (Barreiro-Gen & Novo-Corti, 2015). The significance of this learning is to target the thought process via cognitive-behavioral programming and interventions to assist the offender population in developing a new way of thinking that is not based on antisocial thinking primarily learned during interaction with antisocial peer networks.

#### *Employment and Education*

Employment and education have conflicting research reported on the impact on recidivism (Lockwood et al., 2015; Nally et al., 2014). Employment and education are

often categorized together because the type of employment an individual acquires is based on the level of education achieved. Employment is a topic viewed more as a platform for avoiding criminal behavior, except the challenge in achieving employment for many offenders is overcoming their prior record, which can be difficult (Nally et al., 2014). Those that have more education are considered more employable and are viewed as less at risk to recidivate because of this status (Nally et al., 2014).

Nally et al. (2014) examined data from 6,561 people who had been released from prison. This number was about 43% of the offenders who were released in 2005 from Indiana prisons. The researchers found that 62.4% had jobs between 2005 and 2009 at least a quarter of this period but tended to be underemployed. Further, the sectors that tended to provide employment were construction, retail, health care, food services, waste management, and other unskilled jobs. Lack of education is not the only barrier. For many, it is the belief system and attitude surrounding employment and education to develop a thought process that both are a means of self-sufficiency for themselves and their families (Banse et al., 2013). Banse et al. (2013) conducted a study on the effectiveness of programs addressing pro-criminal attitudes to decrease recidivism and concluded that such attitudes are related to offending again; that most programs decrease pro-criminal attitudes, but there may be alternative explanations; and finally, it cannot be concluded that programs for reducing pro-criminal attitudes decrease recidivism. Still, Banse et al. (2013) noted that empirical studies do not have the methodological and theoretical rigor for testing causal models on how treatment can decrease and how they affect recidivism.



Regarding the education levels of federal offenders, it is a huge span from only completing grade school to varying doctoral degrees. Research shows that the average offender on supervision does not have a high school degree and is less likely to have marketable employment skills to overcome a criminal record, thus impacting recidivism (Petersilia, 2003). Given the research, it would appear the simple solution is to assist the offender in gaining employment or enrolling in an educational program; except, as was mentioned, a major barrier of employment and education is the belief system and attitude of the individual (Banse et al., 2013; Johnson, 2008). Developing a different thought process is the foundation basis of cognitive behavioral interventions based on the principles of core correctional practices (Nee & Ward, 2015).

Cognitive-behavioral programming alone does not solve the problem. However, it needs to be combined with another program, either educational or employment-related (Latessa et al., 2015). If there is not a combination of services, the result does not produce a reduction in recidivism. There is substantial research in cognitive-behavioral interventions and core correctional practices (e.g., Bassett et al., 2016; Mulia et al., 2017) that explain the importance of targeting these areas and how they produce the greatest results. There is still one more factor that needs to be explored impacting recidivism, which is alcohol and drugs.

#### *Alcohol and drugs*

Using alcohol and drugs, similarly to other risk factors, are influenced by antisocial attitudes, poor coping skills, peer influences, and mental health (Alexander et al., 2014). One additional influence that differs from other risk factors is the physical

addiction and withdrawal symptoms from the substance the individual must overcome to remain sober (Alexander et al., 2014). The influence of the alcohol and drug risk factor on federal offenders is significant. Research supports that reducing this risk corresponds with a reduction in recidivism (Cohen et al., 2016).

While the research appears to have provided a simplistic answer, the practicality of reducing substance abuse is one more challenging because alcohol and drugs lower natural inhibition, thus affecting an individual's cognition or ability to think and make good decisions. Often alcohol and drugs are used to combat stressors or self-medicate (National Institute on Drug Abuse, 2016). Keeping this in mind, as it is particularly true for the offender's re-entering society, the goal is to address those stressors with appropriate skills and interventions to assist in the process and provide necessary treatment, so self-medication is not needed. Bucklen and Zajac (2009) claimed that stress is a contributing factor to relapse for an individual under supervision.

Mandiberg and Harris (2014) wrote about the high recidivism rates across the United States. They focused on California, which has the second-highest recidivism rate in the country. Although the sources of recidivism vary, the highest-risk offenders associate with others who commit crimes, have little money, do not have secure housing, do not find jobs that pay a living wage, use alcohol and drugs, and face barriers in dealing with the post-release administrative system (Mandiberg & Harris, 2014). Over half of those incarcerated have serious addiction issues and do not get effective treatment during that time. Yet, recidivism rates can be lowered (Mandiberg & Harris, 2014). Mandiberg and Harris advocated for drug and alcohol-free housing to involve effective intervention

to encourage ex-offenders to become productive citizens. The authors note that a study from Portland State University demonstrated that those who participate in treatment programs in houses could reduce their engagement by 93% in criminal activity.

There is much research supporting the idea that alcohol and drug use is learned and gets reinforced by the user, making it more addictive (Heyman, 2009; Larimer et al., 1999). Focusing on the present instead of the past when attempting to address addiction, specifically related to attitudes towards the drugs, shows significant promise of results (Bahr et al., 2012; Taxman, 1999). Based on this research, effective intervention strategies focus on targeting cognitive-behavioral interventions designed to focus on substance use, which develops motivation, skill deficit, antisocial attitude, and relapse prevention.

### **Evidence-Based Programming**

In reviewing literature focused on community corrections programming, there is a trend of programs used in supervision, which include The Strategic Training Initiative in Community Supervision (STICS), Effective Practices in Community Supervision (EPICS), and Staff Training Aimed at Reducing Rearrest (STARR) (Bourgon et al., 2018). All the programs listed follow the RNR model and are foundationally based on the principles of core correctional practices. Programming formed on these foundational principles is proven to increase offender outcomes based on research (Bourgon et al., 2018), which is important to combat the criminogenic areas increasing recidivism for the offender population to assist in successful reintegration in society.

Viglione (2018) added another dimension to consider when examining evidence-based programming. This dimension encompasses the challenges of implementation specifically related to the impact on effectiveness. Viglione explained the challenges as an officer's perceived liabilities and the struggles of moving towards evidence-based supervision to include risk assessments, case-plans, and programming. The officers can feel overwhelmed by the task they are to perform, considering the volume of individuals supervised. Such large numbers make it extremely difficult to adhere to the original implementation of the program, a crucial component in determining the outcome of success because, without the fidelity of programming, there is no integrity (Clodfelter et al., 2016).

Viglione (2018) is not alone in evaluating programs. This type of research is on the rise; as implementation continues to progress, there will be a need for additional examination programs. The literature currently exists on programs such as STARR, EPICS, and STIX, beginning to examine the evaluation process and measuring some outcomes. However, as time moves on, the need for further evaluation will continue and include measuring for sustainability (Bourgon et al., 2018; Latessa et al., 2014; Lowenkamp et al., 2012). The research demonstrates the success of a program is greatly impacted by implementation and the adherence to the fidelity of the implementation process; all the programs showed promising results when the implementation was followed with "high fidelity," producing a greater reduction in recidivism (Bourgon et al., 2018, p. 16).

### **Summary and Conclusions**

The initial literature review provided insight into addressing recidivism, the criminogenic need of a person under supervision. Evidence-based programming uses the best method possible based on research to address those concerns of cognitions, social networks, drugs and alcohol, and mental health to reduce recidivism. All the literature provides a greater understanding of its importance and a more thorough comprehension of recidivism to create a stronger foundational basis of evidence-based programming and the importance of implementation fidelity.

The studies provided throughout this review demonstrate the importance of continued research in the area of evidence-based programming and recidivism. While current research exists supporting and explaining this topic, there is a lack of literature that sufficiently provides outcomes to evaluate the programming and the impact on recidivism significantly. The literature on the theoretical framework validates the need to examine further the outcomes of programming related to recidivism to determine if it truly works as desired.

In Chapter 3, I provide a detailed description of the research design and methodology of this study. The upcoming chapter will also present crucial information regarding the research population, data collection, and analysis procedures for this study.

### Chapter 3: Research Method

The purpose of this quantitative, nonexperimental, correlative study was to explore the efficacy of evidence-based programming to fill a gap in the literature by focusing on its real-life applicability. Consequently, bridging this gap helped to determine the likelihood, if any, of the recidivism of federal offenders under the supervision of the U.S. Probation Office of a district in the Northeastern United States. While examining criminal recidivism in this study, I also controlled for the offender's risk level produced by the PCRA tool. Furthermore, these data can be used to assist criminal justice professionals and practitioners in implementing evidence-based programming within the criminal justice system, specifically during the case planning process, to provide the most effective services to offenders. The following research question and corresponding hypotheses guided the study:

RQ: What is the relationship between the recidivism of federal offenders exposed to evidence-based programming (i.e., Group A) compared to the recidivism of federal offenders not exposed to evidence-based programming (i.e., Group B) as measured by their PCRA scores?

$H_01$ : There is no statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by their PCRA scores (i.e., the DV).

$H_{a1}$ : There is a statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by the PCRA scores (i.e., the DV).

In this chapter, I provide information about the methodology used in this study to answer the research question. The population chosen for this study was federal offenders under supervision. By narrowing the population for this study, I focused on a specific government level that included a wide range of criminal offenses. The federal government uses a various evidence-based programming and the PCRA, both of which were variables in this study. In this chapter, I also present the rationale, data collection and analysis procedures, validity threats, ethical procedures, and researcher roles, before concluding with a summary.

### **Research Design and Rationale**

In this study, I employed a quantitative method with a correlation design. When a study's objective is to explain a phenomenon by measuring or analyzing variables using statistical analysis, the appropriate methodology is quantitative (Creswell, 2014). The statistical information for this study were derived from secondary data that were collected from the PACTS. I categorized the data by risk level and exposure to evidence-based programming. The design of the study did not involve directly surveying former convicts, who are a protected population; instead, it included the collecting of information from PACTS, a readily available database. Consequently, time and resource constraints will not relevant to the study. The choice of the design was consistent with that of other researchers and will advance knowledge in the discipline, helping to close a gap in the literature by examining the effectiveness of evidence-based programming on reducing recidivism (see Lowenkamp et al., 2012).

I analyzed the data using MANOVA to test if there is significance between the DVs and the IV. The results of the MANOVA provided an understanding of the correlation, if any, that exists between evidence-based programming and recidivism while controlling for the PCRA scores. Higher PCRA scores are consistent with more significant risks, needs, and responsivity to address during supervision, thus increasing the need for interventions. At the same time, low-risk PCRA scores with satisfied supervision conditions are referred to as an administrative caseload. Controlling for the PCRA score had the potential to indicate significance associated with the level of risk and the impact of the evidence-based programming based on the factor being examined. When interpreting findings and assessing and making conclusions related to program effectiveness, it is suitable to use correlative designs and control for redundant data (Wang et al., 2017; Warner, 2013). The importance of such designs is to test hypothesized relationships between variables to predict an outcome (Creswell, 2014). This process assists in determining if the selected variables are related but do not convey causal data.

This study had two main objectives. The first one was to determine if exposure to evidence-based programming produces a positive correlation in reducing recidivism. The second objective was to conclude the significance of risk level in conjunction with evidence-based programming on recidivism. The results may potentially assist community corrections agencies in supporting evidence-based programming, evidence-based training for staff, increased staffing needs to support this type of supervision, and the reform of evidence-based programming to improve outcomes.



## **Methodology**

The method for the proposed study is quantitative. It will have a correlation design using the statistical data on offender recidivism rate by comparing two values: people who have been exposed to evidence-based programming and those that have not. In this nonexperimental quantitative study, secondary data was used and was analyzed by MANOVA for significance while controlling for PCRA scores. The secondary data will be collected from PACTS records and then categorized by risk level and exposure to evidence-based programming.

## **Population**

For this study, the target population was any individual under the supervision of the U.S. Probation Office of a district in the northeastern United States from the FYs of 2012 to 2019. The target group was any person convicted of any federal crime; no criminal offenses were excluded. However, characteristics, such as gender, age, or race, were not included for use in this study. I divided the target population into two groups: Group A and Group B. Group A consists of the offenders who received evidence-based programming, and Group B were those who did not.

In this study, the term *supervision* refers to either a period of supervised release or probation, ordered by the U.S. Court. The individual under supervision is released to reside in the community and supervised by a U.S. probation officer. In this study, the term *community* refers to the jurisdiction of a district in the northeastern United States.

The chief U.S. probation officer of a district can provide formal authorization. I requested permission to access PACTS data for this study regarding offenders under

jurisdictional supervision in the northeastern United States. Authorization was granted with the understanding that there will be no use of personal identifiers. All information will remain confidential and secure.

### **Sampling and Sampling Procedures**

Given the use of secondary data, I employed purposive sampling because random assignment was not possible. Determining the appropriate sample size is critical to not only ensure effect size but that the sample size is substantial enough to address the null hypothesis (Creswell, 2014). For this study, the sample size was the entire data set of all individuals on supervision between FY 2012 until 2019. The sample size varied for Group A and Group B, and each level of risk was determined by the PCRA. I imported and analyzed the data in statistical software known as SPSS, a statistical package for the social sciences.

### **Archival Data**

Because all the acquired data were archival, I did not need or use a research instrument for this study. Using secondary data has become a vital means of conducting research, specifically when the subjects of interest are categorized as a vulnerable group, such as the offender population of this study. All the secondary data analyzed were extracted from the PACTS system, which produced all the required data regarding the offender population. PACTS provided the PCRA score, evidence-based exposure based on the chronological entry, and closure reason. All data compiled were stored securely and encrypted to ensure the confidentiality of identifying information.

I organized the data collected into two sample groups (i.e., Group A, those exposed to evidence-based programming, and Group B, those not exposed) and then sorted the data from FY 2012 to 2019. To comply with the FY as determined by the federal government, data for each year began October 1 and ended on September 30. Each offender was assigned a unique identification number used as an identifier. Subsequently, the information extracted from PACTS was coded through SPSS to analyze the data given the IV and DVs. To reiterate, there was no contact with the federal offenders used in this study because all information was archival.

### **Operationalization of Variables**

The outcome variable in this study was recidivism. I developed the research question to examine the possible relationship between evidence-based exposure and recidivism. This comparison was made with a MANOVA test comparing the two groups, as described previously, based on the IV. For this study, recidivism was defined as reincarceration for either a new arrest or technical violation of supervision, taken from the new arrest module in PACTS. The DV is recidivism, which was scored as 0 for no recidivism and 1 for recidivism, compiling the total number of individuals for each group.

The PCRA is used to determine the level of supervision. The score on this assessment instrument was used in this study as a control variable to determine if there was a relationship between evidence-based programming and recidivism outcome (see Johnson et al., 2011). Johnson et al. (2011) described the data to validate the PCRA from federal presentence reports, existing risk assessments, criminal history record checks, and

PACTS. For this study, only the initial PCRA assessment to determine risk was considered; however, subsequent assessments occur throughout the supervision process.

### **Data Analysis Plan**

For the data analysis plan, I calculated a MANOVA along with frequencies. In a nonexperimental design, the assumption is to answer the research question as to whether a difference exists between groups. There are benefits to using archived data because the results provided from the data have the potential to give empirical support and impact policy decision making, which supports the belief that research contributes to positive social changes and that a study such as the current one had that potential. Getting a response to the hypothesis also provided insight into the significance of evidence-based programming related to the case management of federal offenders' supervision and if the risk is a factor in the process.

As presented in the previous chapter, exploring the extant literature on this topic provided insight into the research question, but it did not produce an answer. I conducted this study to contribute meaningful data and insight for the field of community corrections regarding federal offenders' recidivism. Goggin and Gendreau (2006) expounded on the importance of using core correctional practices and found that when implemented with fidelity by staff, that these practices had a strong impact on recidivism, specifically compared to the staff that did not implement these practices. This research on core correctional practices continues to add to the foundation of evidence-based programming, contributing to the starting point needed for RQ to explain its purpose and need in the field of community corrections.

### **Threats to Validity**

Validity in research is an area of research always discussed, for it is of significant importance. The value of research is based on the study's ability to lead to a valuable conclusion. However, the validity is based on the extent to correctly measure and assess the information obtained (Andrews & Bonta, 2001).

For this study, as previously mentioned, threats to validity are to ensure the manner and integrity of data collection to guarantee consistency throughout the research. The data collected and maintained in the PACTS is regularly audited inter-departmentally and during program reviews conducted by staff of the Administrative Office of the U.S. Courts. Because the proposed study involves data review rather than direct contact with participants, internal validity will not be an issue. I did not interfere in anyone's daily activities or life in general. I did not need to rely on self-reporting, which can be inaccurate but databases reporting similar data for everyone whose information I analyzed. Still, because different people throughout the agency record the information, it might constitute a small threat to internal validity. Negative or positive effects related to the dependent variable, such as job loss or homelessness or obtaining employment, could also affect internal validity.

Additionally, the PCRA is used to determine the risk level and was validated in the research findings of Johnson et al., (2011). Subsequently, research conducted by DeLisi et al., (2018) validated the PCRA by concluding the instrument's ability to predict recidivism outcomes and compliance of individuals on supervision. The PCRA scores are

regularly audited by in-district executive management and during program reviews to ensure validity and protocol adherence.

### **Ethical Procedures**

First, permission to conduct this study was obtained through the IRB of Walden University and granted on December 12, 2019, #0675521. Although this study will not use human participants, the main ethical concern is data collection and maintenance. The data are considered sensitive and confidential, so maintaining the highest ethical integrity level is of the utmost importance. As previously stated, data contains no personal identifiers of the offender to maintain their anonymity and confidentiality. Also, the data involves a protected class of humans. Although the data collected pertains to federal offenders and although not in custody, the individuals are still under custodial supervision, making them a protected group. Since there is no direct contact with the individuals, there is no adverse effect from this study.

All information regarding this research and study was stored on federal government issued equipment and accessed on secured government internet portals as a means of reducing exposure or contamination. The equipment and all data based utilized will be on password-protected files to ensure security. I will delete and discard all information, documents, and files after the 5 year retention period; only the statistical data from the study will be available upon request.

### **Summary**

The purpose of this quantitative, nonexperimental study was to measure evidence-based exposures impact on recidivism for federal offenders, as well as to examine a

correlational relationship of the risk level. The target population for the study was any person under the post-conviction jurisdictional supervision of a district in the northeastern United States between FY 2012 through 2019.

An analysis will show the nature, if any, of the relationship between evidence-based exposure and a reduction in recidivism, as well as a possible correlation to risk level. The goal of this research is to accurately assess and determine if a relationship exists and if there is a reduction in recidivism based on the variable. This chapter was to provide the proposed methodology for this quantitative research and provide meaningful information on the research and rationale, threats to validity, the ethical concerns, and the data collection plan.

The final two chapters will be a culmination of the end product of the research. In Chapter 4, I will in detail present a fully completed presentation of the data collected and the data analysis process. Chapter 5 will bridge the gap between the study results and the current literature while providing potential insight into recommendations for additional research.

## Chapter 4: Results

The purpose of this quantitative, nonexperimental study was to explore the possible relationship of evidence-based programming for federal offenders and its effect on recidivism. In this study, I sought to answer the following research question:

RQ: What is the relationship, if any, between the recidivism of federal offenders exposed to evidence-based programming (i.e., Group A) as compared to the recidivism of federal offenders not exposed to evidence-based programming (i.e., Group B) as measured by their PCRA scores?

*H<sub>0</sub>1*: There is no statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by their PCRA scores (i.e., the DV).

*H<sub>a</sub>1*: There is a statistically significant difference in the recidivism outcome (i.e., the IV) of Group A compared to Group B as measured by the PCRA scores (i.e., the DV).

In this chapter, I discuss the data collection process steps completed, illustrating adherence to the approved research methodology plan presented in Chapter 3. This chapter also includes the study results as well as a demonstration of how researchers had failed to explore current implementation and outcome trends of evidence-based programming in the extant literature. Using the results of the current study, I discuss the real-life applicability and concepts surrounding the problem of recidivism, specifically the need to improve outcomes.



### **Data Collection**

The data used in this study were archival collections extracted from the PACTS on federal offenders. Using archival data, informed consent was not required; however, I received permission to use the data through a data agreement with the Chief U.S. probation officer. The data were not reviewed until the Walden University IRB approved the study on December 12, 2019.

For the purposes of this study, I collected data from PACTS on 5,448 offenders from the FY of 2012 up to and including the FY of 2019. The data included a numeric identifier specific to each offender, the start date of supervision, the close date of supervision, reason case was closed, supervision type, and the initial PCRA risk score. The second extraction of data was on chronological entries with specific codes associated with evidence-based programming STARR, T4C, and interactive journaling. I used the chronological entries once to create duplicate entries of the same offender to ensure the data were collected and categorized by the numeric identifier for each offender. The sample population was narrowed even further to only include those with a case closure reason for successful completion of a term, early termination, or revocation. Successful completion of the term and early termination were merged into one category: successful completion for case closure.

### **Data Analysis Procedures**

I computed frequencies because the data were coded to reflect the scores, recidivism, and risk level. Recidivism and EBP are dichotomous variables, and their only frequencies can be computed. Although risk level is categorical, numbers were assigned

for each level: 0 = *low*, 1 = *low/moderate*, 2 = *moderate*, and 3 = *high*. Frequencies were computed on these cases as well. The frequencies are presented in the next section. I computed a MANCOVA for EBP and risk level and EBP and recidivism. The rationale was that the two groups were pooled from the same sample; therefore, the assumption was that the means would be similar. The results of the MANCOVA are presented in the next section.

### Results

This study was guided by one research question: what is the relationship, if any, between the recidivism of federal offenders exposed to evidence-based programming (Group A) as compared to the recidivism of federal offenders not exposed to evidence-based programming (Group B) as measured by their post-conviction risk assessment scores? In this section, the results of the MANOVA and frequencies are presented.

The total number of cases analyzed were 3,673. Descriptive statistics could not be computed on the variables because they were dichotomous and categorical; therefore, frequencies were computed to analyze the sample. Of the cases reviewed, I computed frequencies on EBP exposure, recidivism, and PCRA risk scores. Table 1 presents the frequencies of cases exposed to EBP. Of the sample, 82.7% were exposed to EBP.

**Table 1**

*Frequencies of EBP Exposure*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3,039	82.7	82.7	82.7

	No	634	17.3	17.3	100.0
	Total	3,673	100.0	100.0	
Missing	System	1	.0		
Total		3,674	100.0		

On the outcome variable of risk level as measured by PCRA scores, 35.6% scored low, whereas 36.9% scored low/moderate. The lowest risk level reported was high, which constituted 7.1% of cases analyzed. Table 2 presents the frequencies on PCRA risk scores. I computed frequencies on recidivism and found that 76.5% of offenders recidivated. This was alarming, considering that 82.7% were exposed to EBP. Table 3 presents the frequencies of recidivism. Further analysis on the outcome variable of recidivism is provided in Chapter 5. I conducted a chi-square test on EBP and risk scores to determine whether the data matched the population and if the categorical variables differed from one another.

**Table 2**

*Frequencies of PCRA Risk Level Scores*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	1,309	35.6	35.6	35.6
	Low/moderate	1,355	36.9	36.9	72.5
	Moderate	750	20.4	20.4	92.9
	High	259	7.0	7.1	100.0
	Total	3,673	100.0	100.0	
Missing	System	1	.0		

Total	3,674	100.0
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**Table 3***Frequencies of Recidivism*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No recidivism	863	23.5	23.5	23.5
	Recidivism	2,810	76.5	76.5	100.0
	Total	3,673	100.0	100.0	
Missing	System	1	.0		
Total		3,674	100.0		

To assess whether a relationship existed between EBP and risk scores, I conducted a MANOVA. Table 4 presents the results of that analysis. The MANOVA was conducted to compare the risk levels in those with EBP and those without EBP. Table 5 compares the means between EBP and recidivism. There was no significant difference in the scores for those with EBP ( $M = .99$ ,  $SD = .915$ ) and those without EBP ( $M = 1.00$ ,  $SD = .932$ ). Based on these findings, I concluded that a relationship exists, but in the opposite direction, so the null hypothesis was rejected.

**Table 4***EBP \* PCRA\_Risk\_Level Crosstabulation*

			PCRA_Risk_Level				
			Low	Low/ Moderate	Moderate	High	Total
EBP	yes	Count	1,085 <sub>a</sub>	1,121 <sub>a</sub>	624 <sub>a</sub>	209 <sub>a</sub>	3,039
		% within EBP	35.7%	36.9%	20.5%	6.9%	100.0%

	% within PCRA_Risk_Level	82.9%	82.7%	83.2%	80.7%	82.7%
	% of Total	29.5%	30.5%	17.0%	5.7%	82.7%
	Standardized Residual.1		.0	.1	-.4	
no	Count	224 <sub>a</sub>	234 <sub>a</sub>	126 <sub>a</sub>	50 <sub>a</sub>	634
	% within EBP	35.3%	36.9%	19.9%	7.9%	100.0%
	% within PCRA_Risk_Level	17.1%	17.3%	16.8%	19.3%	17.3%
	% of Total	6.1%	6.4%	3.4%	1.4%	17.3%
	Standardized Residual-.1		.0	-.3	.8	
Total	Count	1,309	1,355	750	259	3,673
	% within EBP	35.6%	36.9%	20.4%	7.1%	100.0%
	% within PCRA_Risk_Level	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	35.6%	36.9%	20.4%	7.1%	100.0%

*Note.* Each subscript letter denotes a subset of PCRA\_Risk\_Level categories whose column proportions do not differ significantly from each other at the .05 level.

**Table 5**

*Comparing Means Between EBP and Recidivism*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
									Lower	Upper
Close Reason	Equal variances assumed	.165	.685	-.202	3,671	.840	-.004	.019	-.040	.033

Equal variances not assumed	-0.203	919.333	.839	-.004	.018	-.040	.032
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### Summary

In this chapter, I presented the MANOVA results that were computed to evaluate whether there was a difference between those who received EBP and those who had not. Based on the results presented, the null hypothesis was rejected. The results show an inverse relationship that is contradictory to the supporting literature on EBP; therefore, the results of this study did not answer the research question. In Chapter 5, I will provide an in-depth discussion and interpretation of the results that were presented in this chapter.

## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to provide an understanding of evidence-based exposure in the supervision process. I also considered an offender's risk to recidivate dictated by the PCRA score and the overall impact of those two variables on the rate of recidivism. A key objective of the Administrative Office of the U.S. Courts (2018) is to provide services founded on an evidence-based framework, which encompasses supervision practices focused on the RNR model. A component of the RNR framework concentrates on using a risk assessment tool, which for the federal system, is the PCRA tool that determines an individual's risk to recidivate.

In the preceding chapter, I provided an overview of the data collection process and the steps completed, illustrating adherence to the approved research methodology plan presented in Chapter 3. This chapter includes the final discussion and conclusions of the study. Based on the results, I rejected the null hypothesis; this can be considered as a pivotal starting point for further research on this topic. There was a need to create a deeper understanding of the effects attributed to EBP exposure as it relates to offenders under federal supervision on a larger scale.

### **Interpretation of the Findings**

The judicial districts of the federal probation and pretrial services agency across the United States, in addition to addressing diminished budgets, were faced with challenges brought upon by the implementation of The First Step Act of 2018 (S.756-115) and The CARES Act of 2020 (S.3548-116). Both legislative acts brought about significant challenges for organizational leaders who were already managing a reduced

budget that limited hiring capability. They were then faced with an increase in federal releasees, which placed further strain on the system attempting to meet the agency mission and goals of reducing recidivism and providing meaningful opportunities for change through EBP that includes, but is not limited to, STARR, T4C, moral reconnection therapy, criminogenic needs and violence curriculum, motivational interviewing, and interactive journaling. These programs are one component necessary to understanding the services offered while being under federal supervision to meet the agency goal of purposeful interactions with the most significant impact to reduce recidivism.

The findings of this study demonstrate alterations for future research on EBP with a focus on a couple of key components. Conducting similar research on all 94 districts of the federal system would provide a larger data set that could examine outcomes on a greater scale. The chosen size of the study is not the only area to reexamine for potential future research. A researcher could examine if the fidelity of implementation and dosage has the possibility of explaining core correctional practices. There is also a need for both components to be studied with accuracy. Current literature supports the need to implement EBP with fidelity, focusing on how the foundational principles of core correctional practices reduce recidivism (Fixsen et al., 2019). The literature reviewed and discussed in Chapter 2 supports a focus on core correctional practices, the foundational principles of evidence-based practices; however, there are few evaluations and scarce extant research based on real-life case studies in which control groups were created. The current available literature and supporting research do not align with the findings of this



study because practices based in core correctional principles generally demonstrate a reduction in recidivism outcomes.

### **Limitations of the Study**

I identified three limitations within this study. First, my inability to have similarly matched groups of offenders, which is a common limitation for researchers. From the inception of this study, creating matched treatment groups was not an option because the data were secondary in nature. The second limitation was the inability to determine adherence to program fidelity with regards to implementing STARR and other programming throughout the supervision process. Dosage refers to the frequency in which a program is administered and has the potential to impact outcomes. The incorrect dosage skews effectiveness and alters the outcomes for program evaluation. Not being able to determine the accuracy of programming and dosage was a noteworthy limitation. The third and final limitation was my employment at the agency in which the study was conducted; this created the potential for researcher bias to exist and impact the study. Given the results related to the null hypothesis, it was evident I adhered to protocol by not skewing the data and maintaining ethical standards and, instead, allowed the research and results to lead the way.

### **Recommendations**

I have developed several recommendations for future research on the topic of EBP based on my findings and the interpretation of those findings. The first recommendation is to conduct a qualitative study. The benefits of qualitative research are the ability to incorporate data and information from interviews and surveys that can

assess and gauge the impact of a treatment variable on a population. Specifically, interviews and surveys can provide introspective data for analysis to examine programming. For example, interviews and surveys can collect information from offenders on their perspective of the program or data on STARR usage from offenders and officers to determine the significance and correlation of recidivism outcomes. Qualitative research provides an additional layer of data for analysis, potentially offering a more complete picture.

The second recommendation future researchers might consider is extending the length of time used to fully determine the impact of EBP on recidivism outcomes. An additional recommendation is to examine recidivism rates for both groups after supervision is completed and to compare the rates at 1-year, 5-year, and 10-year timeframes. The analysis of long-term recidivism outcomes could provide meaningful results regarding a correlation between EBP and recidivism.

The final recommendation is to expand future research to include all 94 judicial districts of the federal system to increase the quantity of data. The inclusivity of all judicial districts not only increases the amount of data but could be a more thorough representation of the system. The recommendations for future research provide opportunities and potentiation for researchers to aid criminal justice practitioners, specifically those involved in community supervision, by delivering research on effective interventions and techniques to offer meaningful behavioral change.

### **Implications**

The hypothesis of this study was to determine a correlation between EBP and a reduction in recidivism outcomes for federal offenders; however, the findings do not illustrate a discernible difference. Black box modeling, which can be used to evaluate programming, can be too simplistic because it focuses on outcomes without referencing much else (Linfield & Posavac, 2018). This study can be defined as a black box model because it only focused on the outcome of recidivism and did not consider other factors. Previous researchers have suggested that new research go beyond the black box model to consider additional factors and not limit the scope of the study to outcomes (Linfield & Posavac, 2018).

Positive social change has the potential to impact other members of society on different levels across the country. The purpose of this study was to provide positive social change on a societal level. Specifically, the purpose was to assist criminal justice practitioners and those under their jurisdictional supervision to understand the outcome measures of programming. The goal of supervision is to provide offenders with a meaningful opportunity for change by providing them with the tools for future cognitive success. While the results do not demonstrate a decrease in recidivism outcomes, an increase was also not evident, causing me to reject the null hypothesis. This finding leads to the development of a deeper understanding and appreciation for fidelity as it relates to implementation and dosage as crucial components of program evaluation and outcomes (see Fixsen et al., 2019).

## **Conclusion**

In conclusion, this study originated from a professional interest in providing optimal services as an agent of change. The goal of this study was to examine the possible statistical significance of EBP to reduce recidivism. While the results of this study caused me to reject the null hypothesis, the potential exists to base future research off of this study to extract more data and, especially, to expand future research to include all judicial districts to produce results representative of the entire system. Previous literature has demonstrated the validity of EBP when created with the principles of core correctional practices (Bonta et al., 2000; Bayens & Smykla, 2012; Bourgon et al., 2018). EBP is successful when implemented with fidelity, but to ensure a program's fidelity is difficult and more challenging after implementation. My goal is to one day examine EBP on a larger scale and be able to provide a clear and true representation of the impact associated with recidivism outcomes with the hopes of aiding in positive social change for community supervision practices.

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