2017

Recidivism Rates Among Juveniles With Mental Illness

Kia Chevon Russell
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Kia Russell

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Kimberly Rynearson, Committee Chairperson, Psychology Faculty
Dr. Donna Heretick, Committee Member, Psychology Faculty
Dr. Victoria Latifses, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

Recidivism Rates Among Juveniles With Mental Illness

by

Kia Chevon Russell

MA, Prairie View A & M University, 2011

BS, Sam Houston State University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

November 2017

Abstract

Treating mental illness is imperative to help reduce criminal justice involvement within the juvenile population. Receiving mental health care will help decrease the likelihood for youth to reoffend, ultimately reducing recidivism rates. Past studies showed there are risk factors associated with juveniles and recidivism; however, very few studies have examined what factors are prevalent after services have been received. The purpose of this study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County, Texas. Risk factors that were assessed included age, gender, ethnicity, and criminal offense. The psychodynamic perspective guided this study and archival data were obtained from the Harris County Psychiatric Center Database. Several statistical analyses were used in this study to include a *t* test, chi square analysis, and a binary logistic regression analysis. Results from this study found no significant relationship with mental health diagnosis and recidivism nor did it find a significant difference in the length of stay at the psychiatric center. This study did find that simple demographics were stronger than any predictor, concluding that younger Black males were more likely to recidivate. Based on the findings from this study, juvenile justice representatives will be able to evaluate and develop programs specifically targeted to the risk factors found to be associated with recidivism.

Recidivism Rates Among Juveniles With Mental Illness

by

Kia Chevon Russell

MA, Prairie View A & M University, 2011

BS, Sam Houston State University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

November 2017

Dedication

Mom, I thank God for you, for the love you give, the wisdom you share, and all of the ways you bless my life with your beautiful heart.

Russey Pooh, to the one who told me to go and get it. There were many days I second-guessed myself, wondering why I listened to you, but here I am and I thank you for believing in me.

My beautiful girls and my little man, without you, my house would be clean and my wallet would be full, but my heart would be empty. When I tell you I love you, I do not say it out of habit, I say it to remind you that you are the best thing that has ever happened to me and my life is better because of you. If I can achieve my goals, I can only imagine all of the things you will accomplish.

We don't know who we are until we see what we can do. –Martha Grimes

This is for you!

Acknowledgments

This dissertation has definitely been a labor of love and would not have been possible without the assistance and help of so many people. Your endless support and encouragement is sincerely appreciated.

First, I would like to thank God for giving me strength and supplying me with an endless amount of faith. I faced many difficulties along the way, but I still managed to hang in there all the way to the finish line. I would like to thank Dr. Susan Randers, my doctoral chair, for your endless support and for never giving up on me. I would also like to thank Dr. Kimberly Rynearson, my doctoral cochair, for joining the team and for helping me complete this project. Last, I would like to thank my aunt Dr. Jennifer Butcher, Carla Glover, Erin Cole, Crystal Balogh, and Chanelle Scott. Thank you for letting me bounce ideas off you and for encouraging me to keep going when I felt like giving up. You have no idea how much I appreciate you.

Thank You.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Introduction

Mental illness among detainees and how to treat them has been a concern for many years (Aufderheide, 2014). Programs such as mental health courts, diversionary programs, and community mental health services all have been designed to help treat those with psychiatric illnesses, but the rates for this population continues to increase (Fisher et al., 2014). Juveniles and crime have been a continuous problem for society (Roberts, 2015). In 2011, law enforcement agencies within the United Stated arrested 1.5 million juveniles who fell under the age of 18 (Puzzanchera, 2013). Within that count, 29% of those arrested were females, and 27% were youth younger than 15 years of age (Puzzanchera, 2013). Offenders who suffer from mental health disorders make up approximately 50% of the U.S. prison population (Sarteschi, 2013) and among those, large amounts of this population suffer from behavioral or emotional problems requiring mental health services (National Institute of Mental Health, 2013).

Being released from incarceration without receiving the proper mental health support decreases the likelihood that the individual will successfully avoid reincarceration after they have transitioned back into the community (Fisher et al., 2014), which ultimately results in recidivism (Mulder, Brand, Bullens & van Marle, 2011). In order to prevent recidivism, there needs to be provisions in place that will target specific risk factors found to be prominent among juvenile offenders who suffer from a mental illness (Morgan et al., 2012). Factors that have been associated with juvenile recidivism among offenders with mental illness have indicated that age, gender, and race

significantly predict failure rates (Castillo & Alarid, 2011; Thompson, 2010). In order to provide more appropriate prevention programs, researchers have suggested that it is imperative for these risk factors to be assessed (Mulder et al., 2011).

Jails and other juvenile facilities employ a psychiatrist to conduct medication assessments (Castillo & Alarid, 2011), but very few adequately provide thorough psychiatric stabilization geared to target youth's needs in a therapeutic environment. The youth included in this study were exclusively sent to a psychiatric unit in need of mental health stabilization.

Background of the Problem

Mental illness among offenders has become not only a statewide problem but also has gained the attention of the nation's policy makers and government officials (Skeem, Winter, Kennealy, Louden, & Tetar, 2014). This attention is mostly due to the number of individuals who become incarcerated and the poor outcomes they face either in detention or in the community (Skeem et al., 2014). According to the Bureau of Justice Statistics (2009), the United States had 7.3 million adults who were being supervised by a correctional institution. The Substance Abuse and Mental Health Services Administration (2016) reported that 50% to 70% percent of juveniles within the juvenile justice system suffer from a mental illness. The Council of State Government (2002) stated that "the current situation not only exacts a significant toll on the lives of people with mental illness, their families, and the community in general, it also threatens to overwhelm the criminal justice system" (p. 6).

Mental illness that has been untreated is predicted to be the cause of criminal justice involvement (Prins, Skeem, Mauro, & Link, 2015); it is important to get to the root of the problem. Providing mental health services has been determined to be a relevant approach to help reduce criminal justice involvement (Skeem, Manchak & Peterson, 2011). Having the youth participate and receive services is believed to help reduce the risk for those to reoffend, ultimately resulting in lower recidivism rates (Skeem et al., 2011). Increased mental health services, to include any form of therapy or psychiatric care, has been advocated by clinicians and child welfare researchers under the assumption that it will decrease the likelihood of the youth being involved in a juvenile justice system as well as an improvement in clinical care (Kerker & Dore, 2006).

Colins, Vermeiren, Vahl, Markus, Broekaert, and Doreleijers (2011) conducted a study on male adolescents between the ages of 12 and 18 years and attempted to show a relationship between criminal recidivism and mental illness with a focus on substance abuse and criteria of at least one violent arrest. However, researchers failed to look at all juvenile adolescents, and due to the small sample size, this did not allow them to factor all mental health disorders (see Collins et al., 2011). Yampolskaya and Chuang (2012) found an association with children and criminal justice involvement, which was a mental health diagnosis, but they failed to find a specific mental health disorder that had a significant association with recidivism. Cropsey, Weaver, and Dupre (2008) examined mental health disorders such as attention-deficit hyperactivity disorder, conduct disorder, and depression, but they failed to find a common denominator to predict criminal recidivism among the juvenile population. One explanation that Cropsey et al. believed

contributed to this limitation is the possibility that youth with mental health problems are more likely to be diverted when arrested to a public mental health system rather than placed at a detention center.

There are several risk factors that have been predicted to increase the chance of recidivism among youth, especially among the mentally ill population. Fazel and Yu (2011) concluded that there are similar factors among offenders who suffer from mental illness that can increase the risk to reoffend. Other researchers have identified risk factors associated with criminal recidivism to include mental illness, age, gender, demographic factors, and substance abuse (Evans, Huang, & Hser, 2011; Kopak, Hoffmann, & Proctor, 2016).

In this study, I identified factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County. By examining these factors, I was able to address the research gap.

Statement of the Problem

When referring to juvenile delinquency and mental health issues, both of these variables are related when the focus is on criminal behavior (Cropsey et al., 2008). It is important to focus on the mentally ill population as they have a high rate of criminal behavior among the juvenile and adult population (Fisher et al., 2014). When attempting to treat mental health disorders, it is more complicated and challenging to treat youth compared to adults (Hammond, 2007). The public's attitude regarding mentally ill offenders who are released back into the community is reported to be distrust, dislike, and fear (Barney, Corser, & White, 2010). On the other hand, individuals who work with the

mentally ill population believe that if these individuals received the services that they need, it is less likely that they will recidivate (Yampolskaya, Mowery, & Dollard, 2014). A popular belief is that those who have committed a serious offense are more than likely to commit other serious offenses in the future (Owen & Cooper, 2013).

Juvenile offenders who have been hospitalized at a psychiatric facility have been known to enter the juvenile justice system after they have been discharged (Yampolskaya et al., 2014). There is a need to determine what the recidivism rates are in order to determine how it is related to criminal behavior (National Institute of Justice, 2014). According to McReynolds, Schwalbe, and Wasserman (2010), there are several ways recidivism rates are tracked to include rearrest, readjudication/reconviction, recommitment/reincarceration, technical violations/revocations, and new offenses. For this particular study, recidivism consisted of any youth who was rearrested and detained in the detention center for a misdemeanor or higher offence within 365 days of leaving the psychiatric facility. Statistics have shown that approximately 65% of juveniles who entered the juvenile detention center in Harris County (Houston, Texas) were diagnosed with an emotional disturbance disorder, 36% had a history of exposure to trauma, and 76% had a substance abuse diagnosis (Harris County Juvenile Probation Department [HCJPD], 2014).

When juvenile needs are not appropriately addressed, a downward spiral can arise due to factors that can influence recidivism (Mallet, Fukushima, Stoddard-Dare, and Quinn, 2012). Past studies varied on how long recidivism should be examined, ranging from 1 year to 35 years (Hargreaves & Francis, 2014; Herz, Ryan, & Bilchik, 2010). One

year could be problematic, as adolescence is a period of development, emotional or behavioral, that can change substantially from one year to another (Liu, 2011). Factors that can influence recidivism such as age, gender, ethnicity, mental health diagnosis, criminal offense, and length of stay in a psychiatric stabilization program were examined to determine what effect, if any, they had on juvenile recidivism. Receiving mental health services does not guarantee that juveniles will remain in a stable condition and avoid future criminal activity (Aufderheide, 2014). Wartna et al. (2011) found that more than half of juvenile offenders revert back to criminal behavior within 2 years after they have been released.

Purpose of the Study

The purpose of this quantitative study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County. In this study, I used archived data obtained from a database created by the HCJPD. Each juvenile who is sent to the Harris County Psychiatric Center (HCPC) unit is logged into the database along with characteristics associated with them such as their age, gender, ethnicity, mental health diagnosis, criminal offense, and their length of stay at the psychiatric unit.

Research Questions and Hypotheses

Research Question 1

Is the type of mental health diagnosis significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center?

$H1_0$: The type of mental health diagnosis is not significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

$H1_a$: The type of mental health diagnosis is significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

Research Question 2

Is there a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not?

$H2_0$: There is no significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

$H2_a$: There is a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

Research Question 3

Does length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days, beyond the influence of statistically significant covariates?

$H3_0$: Length of stay at the psychiatric hospital and mental health diagnosis do not significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

$H3_a$: Length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

Theoretical Framework

There are several theories that attempt to explain juvenile criminal behavior and why it occurs. Bowlby (1944) suggested that there was a linkage with early separation experiences to juvenile delinquency, which can be true for some cases, but several studies have not been consistent when attempting to link the two (Pasco-Fearson & Belsky, 2011; Fearon, Bakermans-Kranenburg, van Ijzendoorn, Lapsley, & Roisman, 2010). The experiences of early relationships typically lay the foundation to future behavior and improve stability that is strongly associated to environmental changes and psychosocial stressors (Thompson & Raikes, 2003; Vondra, Shaw, Swearingen, Cohen, & Owens, 2001).

Psychodynamic perspectives are geared to explain symptoms, in terms of meanings, that are used routinely to explain the present behavior or the behavior of others (Hill & Sharp, 2015). Terms such as love, loss, rejection, and fear are a significant part of the psychodynamic perspective and are used within mental health programs, particularly in therapy sessions (Hill & Sharp, 2015). Traumas that occur in childhood, not limited to sexual, physical or exposure to domestic violence, are common and contribute to many

forms of psychopathology (Hill & Sharp, 2015). Freud hypothesized that young children use mental mechanisms to help them deal with traumatic experiences, which then helps to alleviate distress (as cited in Bartol, 2002). This adaptive function is not manifested until later on in developmental stages (Bartol, 2002).

Freud had theories of how a child attempts to manage intense distress, but whether or not a traumatic situation occurs not only depends on the trauma but also the child's comfort zone (as cited in Hill & Sharp, 2015). When the trauma is combined with the child's emotionality, the availability of comfort from their guardian plays a major role (Hill & Sharp, 2015). The psychodynamic perspective tends to look at the situation from a child's perspective as to how the trauma affects them and how they handle the stressors associated with it (Hill & Sharp, 2015).

Nature of the Study

This study was quantitative in nature, and I used a series of tests to include *t* test, chi-square, and regression analysis in order to identify factors that are associated with and predictive of recidivism. The belief is that risk factors associated with their mental illness causes juveniles to commit another criminal act that ultimately results in recidivism. The data were obtained within an 8-year period, 2007 to 2015, from HCJPD records. When comparing individuals who suffer from a mental illness to those who do not, typically those with a mental illness have greater needs (Castillo & Alarid, 2011).

The independent variables consisted of mental health diagnosis and length of stay at the psychiatric hospital. I also assessed the potential covariates to include age, gender, ethnicity, and criminal offense to see if any of these variables were relevant to this study.

The dependent variable was recidivism, which was determined to be any youth who was rearrested and detained in the detention center for a misdemeanor or higher offence within 365 days of leaving the psychiatric facility. Binary multiple logistic regression was used to investigate the association with any significant covariates so that these may be controlled for before assessing the influence of mental health diagnosis and length of stay at the psychiatric hospital. To measure for this association, dichotomous research questions were used in a yes/no format.

Operational Definitions

Criminal behavior: An act or failure to act in a way that violates public law (Bartol & Bartol, 2012).

Delinquency: Any act prohibited by the law, such as theft, burglary, violence, robbery, vandalism, and drug use (Bartol & Bartol, 2012).

Detained: Detention is the process when a state or private citizen lawfully holds a person by removing his or her freedom of liberty at that time, which can be due to (pending) criminal charges being raised against the individual as part of a prosecution or to protect a person or property (Bartol & Bartol, 2012).

Juveniles: Any youth between the ages of 11 and17 who has been accused or was found guilty of a criminal act (Bartol & Bartol, 2012).

Mental illness: "Mental illness is characterized by psychiatric disorders which continue over time and contribute to serious difficulties in personal and social functioning, thereby reducing the quality of life of the affected person" (Gühne, Weinmann, Arnold, Becker, & Riedel-Heller, 2015, pg. 173).

Psychiatric stabilization: The management of mental and emotional disorders to help relieve symptoms and change behavior to improve social and vocational functioning (National Institute of Justice, 2014).

Recidivism: The "repetition of criminal behavior" (Langrehr, 2011, p. 23) and/or continued association with the legal system for a new criminal offense, including a misdemeanor or higher offence.

Risk factors: Demographic variables associated with recidivism that cannot be changed (e.g., age, gender, race; Day & Wanklyn, 2012).

Assumptions and Delimitations

The HCPC accepts youth into their program generally due to a mental health issue that they are struggling with. When assessed by the psychiatrist, medication will be supplied to help youth manage and cope with symptoms that might arise, on a case-by-case basis. In this study, I assumed that all available documentation had been recorded and supplied to the juvenile probation department to include history of mental illness, medication that the youth was currently taking, and their compliance on the medication.

Another assumption was the accuracy of psychological evaluations. A psychological evaluation consists of a psychological interview, psychological tests related to the presenting problem, summary of the results, and any recommendations. Every youth who is detained in the detention center must undergo a psychological evaluation. The forensic units as well as interns who are currently working at the juvenile detention center conduct these evaluations. The psychological evaluation provides a

mental health diagnosis based on the perspective of that particular individual who is conducting the study. Since staff at the psychiatric unit later reference these evaluations, I assumed that all staff had been trained and were able to make a precise supposition based on the information that was obtained.

This study does not cover other extraneous factors that could potentially attribute to the likelihood of recidivism among juveniles, such as social and biological influences, environmental factors, and family dynamics and influences. Instead, I looked directly at recidivism rates without directly associating extraneous factors.

Limitations of Study

Having a mental illness does not guarantee that a juvenile will be sent to the psychiatric stabilization center, as one can be admitted for therapy for individual and family sessions. The juvenile's level of functioning determines if a recommendation for psychiatric stabilization is made and is assessed on a case-by-case basis. Needing therapy may not warrant the need for medication nor does it mean that a juvenile is given a mental health diagnosis. In this study, I also failed to include risk factors, such as family, biological, and social influences, that may be an impending contributing factor for juveniles to recidivate.

Researchers have indicated that juveniles who already have history with the criminal justice system are more likely to be rearrested compared to persons without a history (Skeem et al., 2011). Factors such as psychiatric history or the pattern of continued criminal behavior increases the probability that one will be detained pending court action.

Another limitation of the study is the fact that all of the juveniles who are sent to the psychiatric center are under the jurisdiction of Harris County, Texas. There are various contiguous counties surrounding Harris County, but for this particular study, the greater number of participants was in this area. Focusing on this particular county did not allow geographic differences to be accounted for. Urban versus rural areas could impact the recidivism rates due to factors such as socioeconomic status as well as the number of available community resources.

Significance of the Study and Implication for Social Change

Psychiatric disorders pose a challenge for the juvenile justice system and the mental health system that services juveniles upon release (Castillo & Alarid, 2011). About 50% to 70% of juvenile offenders have been diagnosed with a behavior disorder consisting of conduct disorder, antisocial behavior disorder, oppositional defiant disorder, and disruptive behavior disorder (Colins et al., 2010). As a result of these mental illnesses, juveniles continue to become involved with criminal behavior, which can continue through adulthood (Colins et al., 2010).

By focusing on juveniles who are suffering from a mental illness, I provided insight as to what contributing factors result in continued criminal behavior among juveniles who suffer from mental illness**.** The juvenile criminal justice system continues to increase, and the mentally ill offenders are beginning to set precedent among this population (Morgan et al., 2012). As a result of this study, researchers will be able to evaluate relevant services and preventative measures solely focused on the factors that were concluded to increase the criminality rate among juveniles, ultimately causing high

recidivism rates. The recidivism data received from this study will also help to educate juvenile justice representatives who will allocate future resources for this population (Justice Center, 2014), leading to a positive social change not just for the mentally ill youth but also to the community.

Summary

Mental illness among youth is becoming a growing problem within the criminal justice system. Past research and current literature provide great insight as to why this population is important, requiring immediate attention and intervention. For youth who are suffering from mental illness, determining significant factors ultimately help to provide services that will alleviate challenges that they might face once they are released back into the community.

In the next chapter, I review the literature as it pertains to youth who suffer from mental illness and the risk factors that contribute to recidivism. I will also discuss the theoretical framework.

Chapter 2: Literature Review

Introduction

Within the United States, juvenile crime has become a serious issue, as 24% of the population are juveniles under the age of 18 (Census Bureau, 2014) and they are responsible for over 10% of all arrests (Federal Bureau of Investigation, 2012). It has been reported that the United States correctional systems fail to provide appropriate mental health services for detainees (Morgan et al., 2013), and as a result, the majority of offenders with mental illness require inpatient care due to acute psychiatric symptoms (The University of Texas, 2015). Individuals who are working in any capacity dealing with the criminal justice system believe that those individuals who are suffering from a mental illness become involved in the criminal justice system because the mental health system has failed them (Skeem et al., 2014). The idea is that if those who have a mental illness receive the needed services, then they likely will not become involved in the criminal justice system (Skeem et al., 2014).

The HCPC was designed to stabilize juveniles who are pending court so that they can be released back into the community (The University of Texas Health, 2015). The unit has 21 beds to hold female and male juveniles between the ages of 11 to 17 years old (HCJPD, 2015). The HCPC is a secure facility that is surrounded by a fence and locked doors inside the facility (The University of Texas Health, 2015). The juveniles' freedom is restricted based on elopement status, and most of their time is spent within this functional unit for their daily activities (The University of Texas Health, 2015). On the unit, juveniles are supervised by nursing staff, therapists, a psychiatrist, and volunteers 24

hours a day (The University of Texas Health, 2015). It is an intensive, therapeutic, and comprehensive program geared for juveniles who are experiencing a decrease in functioning, experiencing symptoms to include anxiety disorders, personality disorders, conduct disorders, affective disorders, autism spectrum disorders, attention-deficit hyperactivity disorder, psychosis, and substance abuse (The University of Texas Health, 2015). This unit offers an alternative to the more restrictive setting, such as the detention center, while allowing the juvenile to remain connected to their family and community advocates (The University of Texas Health, 2015).

Stabilization on this unit consists of individual counseling, family counseling, group counseling, medication compliance, and medication management (The University of Texas Health, 2015). The lack of social and family support has been identified as an obstacle to the mental health field because many are unable to completely understand the offender's diagnosis as well as how to effectively support them (Castillo & Alarid, 2011). This program uses cognitive-behavioral therapy, dialectical-behavioral therapy, and trauma-focused therapy (The University of Texas Health, 2015). The goals for stabilization include improving emotional regulation, increasing anxiety reduction, improving crisis survival strategies, and the successful usage of coping skills (The University of Texas Health, 2015).

Juveniles on this unit are held until they are stable and deemed ready for discharge (The University of Texas Health, 2015). Due to this unit being a voluntary program, juveniles are allowed to refuse participation in the program and thus will be either returned back to detention or they will be discharged from the program due to

noncompliance (The University of Texas Health, 2015). Those who fall into this category were not included in the study. Recidivism was acquired from a different archived database used by HCJPD that established reentry, in the form of being arrested and detained, into the detention center for a misdemeanor or higher offence within 365 days of leaving the psychiatric facility.

I begin this literature review with a detailed background into the theoretical foundation that guided this study. I also provide insight and define who juveniles are, what mental illness is, and the importance of mental health stabilization. In the final section of this literature review, I discuss recidivism and the factors that are associated with it, such as age, gender, ethnicity, mental health diagnosis, criminal offense, and length of stay at a psychiatric hospital. Identifying these key factors helped determine which risk factors are more prone to recidivate.

Literature Search Strategy

In this study, I used the Internet to search relevant topics on mental illness, juvenile delinquency, recidivism, and psychiatric needs. I used the following research databases: SAGE Full Text, PsycINFO, Google Scholar, PsychARTICLES, peer-reviewed journals publication, EBSCOhost, and Criminal Justice Periodicals. I also used the DSM-5 (APA, 2013). The following keywords were used to obtain peer review articles: *juveniles, mental illness, recidivism, mental health, youth, age, gender, psychiatric, stabilization, criminal justice, race,* and *diagnosis.*

Theoretical Foundation

There is extensive literature related to criminal behavior, but when attempting to explain criminal behavior and recidivism, there is not a single theory that clearly defines this behavior. In this study, I examined various risk factors to determine how they are related to recidivism among a population of youth who received mental health services. The psychodynamic perspective seemed to be the most appropriate approach to help answer the research questions for this study.

Psychodynamic Perspective

The psychodynamic perspective, fundamentally based on the ideas of Freud (1915), believed that human behavior as well as violent behavior is the product of forces operating within someone's mind known as the "unconscious." Due to childhood experiences, Freud believed that early childhood experiences had a direct impact on adolescent and adult behavior. The conscious mind is everything within one's mental processing that allows for them to think and communicate normally (Freud, 1915). Being in the conscious state of mind, memory is a huge integral part, as the preconscious mind represents ordinary memory while the conscious mind has it stored and ready to be retrieved at any time (Freud, 1915). One may not be thinking about past experiences, but these can still influence actions and behaviors (Bartol, 2002).

Focusing on the nature of crime but ignoring experiences during childhood and adolescent years show little promise of effectiveness within criminal justice programs (Freado & Bath, 2014). For parents of young children, there is a moral and legal obligation to care for their child (Cooks, 2010). Healthy development starts with

protective and nurturing adults, beginning in the infancy stage to early childhood (Freado & Bath, 2014). Freud (1915) thought conflicts that occur at various psychosexual stages of growth could impact the ability for one to operate as a normal adult. There is a very strong correlation in the number of adverse events a child has experienced and the incidence of serious behavioral, medical, and social outcomes (Reavis, Looman, Franco, & Rojas 2013). Adverse events include physical, sexual, and emotional abuse as well as physical and emotional neglect (Reavis et al., 2013). Being raised in a dysfunctional household also affects a child, such as a divorce, substance abuse, member of the family being imprisoned, or physical or verbal abuse being attributed to a parent (Cooks, 2010). The unconscious mind will have thoughts, memories, emotions, and desires that may become apparent outside of our awareness but can still cause an influence on one's behaviors (Freud, 1915).

Normalcy, structure, and stability give children an opportunity to have a healthy normal life (Freado & Bath, 2014). When stress becomes involved, Aichorn (1935), a psychoanalyst who is associated with the study of criminality, believed that it would result in criminal activity for those who suffer from a mental state known as latent delinquency. According to Aichorn, latent delinquency derives from poor childhood socialization due to childhood neglect or abuse, ultimately damaging an individual's ego that enables them to deal with circumstances deemed stressful within society. This group of individuals has an immediate need for gratification, inability to feel guilt, and a lack of empathy for others (Aichorn, 1935). Similar to other psychodynamic theories, a youth is

an easily frustrated person who acts in a violent nature due to occurrences and issues that happened in early childhood (Bussey & Bandura, 1999).

A healthy development helps the child to gain skills in learning, planning, and self-control (Felitti & Anda, 2010). It is expected for children to grow in maturity, mentally and physically, and to develop a sense of self-esteem, but when adverse development is present, such as depression or suicidal ideations among other illness, concerns might arise (Felitti & Anda, 2010). Being impacted by adverse development does not provide an excuse for children to break the law, but it should be noted that they are not yet adults (Freado & Bath, 2014). Youth who have been traumatized need to experience caring relationships to feel safe in order for them to be able to learn how to cope with the challenges with which they have been presented (Reavis et al., 2013). Along with childhood stressors, one must also take into consideration that mental illness is a component that is also a direct correlation to juvenile criminal activity (Hammond, 2007).

Recidivism

Mental illness among juveniles and recidivism has been an ongoing issue (Wang, Hay, Todak, & Bales, 2014), and as time progresses, the juvenile population is steadily increasing. Mental health services may be received while detained in a detention center, but the lack of resources available and used in their community once released is a factor that can affect recidivism (Gonzalez & Connell, 2014). Once a juvenile is released from custody, they typically return back into the community where they resided prior to being detained. Heath, Church, and Curran (2014) stated that the geographic location could be

the cause of high recidivism rates due to the low amount of community support as well as reoccurring crime in that area. Not only is community support important but social support received from family and friends is also beneficial for youth once they are released back into the community (Cochran, 2014; Linz & Sturm, 2012).

Mental illness is not only a factor that can cause high recidivism rates among juveniles, risk factors are also contributing factors. Mudler et al. (2011) conducted a study to look at the severity of recidivism among juveniles and to determine associated risk factors. Having an understanding as to which risk factors contribute to recidivism is important in order to increase the effectiveness of mental health programs and to reduce the continuance of juvenile criminal behavior (Wehrman, 2011). Within the study, Mudler et al. found that risk factors can be separated into two categories, static risk factors and dynamic risk factors. Static risk factors cannot be changed, such as age, ethnicity, and sex, while dynamic risk factors, such as education and environmental factors, can be alerted and used as in intervention to help reduce juvenile recidivism rates (Mudler et al., 2011; Wehrman, 2011). Mudler et al. examined 728 juvenile offenders aged 12 to 18 between the years of 1994 and 2004 who were placed in the Dutch juvenile justice system. They found that there are a number of static risk factors contributing to high recidivism rates, such as the age of the first offense and lack of parenting during early childhood. Dynamic risk factors such as lack of participation in services, negative peers and poor coping skills were high among those who recidivated (Mudler et al., 2011). They found that there is a significant association between static and dynamic risk

factors that contribute to juvenile offending and juvenile recidivism rates (Mudler et al., 2011).

The experience one may have while being placed in a detention center could be the sole deciding factor as to whether or not future criminal activity will occur (Listwan, Sulivan, Agnew, Cullen, & Colvin, 2013). Some believe that detention centers should be designed to be very unpleasant in order to deter people from wanting to return, as it is a form of punishment (Hollin, 2002). The 104th Congress attempted to pass the No Frills Prison Act (H. R. 663) in 1995, which was a bill attempting to remove the opportunities and amenities that one will receive while detained, but the bill failed to be enacted (Hollin, 2002).

Juveniles

Juvenile violence has increased and is a national concern; many are focused on punishment, very few focus on intervention and prevention (Roberts, 2015). Within the United States, juveniles are treated differently than adults, and in most states, young people are considered juveniles up to the age of 18 years (Roberts, 2015). According to Bartol and Bartol (2012), a criminal is someone whose behavior is in violation of laws that are set in place. Depending on the crime, a juvenile can be transferred to the criminal court and will be tried as an adult (Roberts, 2015). Recently, the increase in crime among juveniles has become more serious, such as murder and violent acts of harm, often related to gang affiliation and drugs (Roberts, 2015).

Understanding juvenile crime can be complicated, as there are numerous factors that can lead someone to partake in criminal behavior. There are biological and

psychological factors that help to explain juvenile delinquency, but there are also social factors that hold merit (Roberts, 2015). Juvenile delinquency is a massive and diverse topic, and even though the juvenile justice system has evolved over the years, it is still believed that juveniles should be treated differently from adults (Roberts, 2015). Juveniles have separate detention facilities, procedures, rules, laws, and courts for the purpose of protecting juveniles with the intent of rehabilitation and for protecting the safety of the community (Roberts, 2015).

The public has become more aware of juvenile crime due to media outlets and their reporting techniques. Getting to the root of the reason as to why crime is committed requires strategies that are geared for prevention and early intervention (Roberts, 2015). When it comes to preventing crime, prevention and early intervention are more promising than rehabilitation programs (Roberts, 2015). When youth first show signs of antisocial or delinquent behavior, they are much easier to assist compared to when they become delinquent criminals (Roberts, 2015).

There are a small number of youth who are diverted away from delinquency. This group of youth typically commits only one or two offenses, as the experience of being arrested by an officer, having to spend a night or two in jail, fear of facing their parents, or the interaction with a probation officer is enough to deter them from committing another offense (American Society of Criminology, 2013). There are other factors that contribute to juvenile's criminal activity. Having trouble in school, such as poor attendance, low academic performance, expulsion or suspension, and dropping out of school, are strong indicators for predicting criminal behavior in the future (American

Society of Criminology, 2013). Societal factors such as a change in the economy can result in fewer job opportunities for the youth and their family (HM Government, 2009). Parental supervision has been known to be included in the causes of juvenile delinquent acts (American Society of Criminology, 2013). Many families consist of either one working single parent or two working parents, which often make it difficult to provide adequate supervision (HM Government, 2009). Not only can peers be the teacher of criminal behavior, witnessing a family member commit criminal acts is also a viable factor (American Society of Criminology, 2013). While acknowledging that these factors are all relevant when it comes to depicting criminal behavior, the mere presence of mental illness is a dominate element that will greatly increase the likelihood of criminal behavior (Morgan et al., 2013).

Mental Illness

Surprisingly, the majority of juveniles in the United States who have committed crimes and are placed into a detention center have mental health difficulties (Knoll & Sickmund, 2010). Due to the challenges of obtaining mental health services, youth have trouble in school, home, and within the community, ultimately resulting in detainment (Stoddard-Dare, Mallett, & Boitel, 2011). When youth are identified to be at-risk for detention due to mental illness, it is important to understand what difficulties the youth might experience as well as the specific mental health disorder that they are exhibiting (Stoddard-Dare et al., 2011).

It has been reported that juvenile justice youth have high rates of childhood abuse, co-occurring substance abuse, and trauma (Smith & Saldana, 2013). Victimization and

maltreatment experienced by juveniles such as abuse and neglect are considered to be significant indicators of recidivism (Barrett, Katsiyannis, & Zhang, 2014). These youth may pose a safety risk not only to themselves, but also to others within the community if they are not identified and treated (Juvenile Law Center, 2015). Due to the probationary conditions or the demands of institutional placements, youth who are untreated may find themselves profoundly immersed in the criminal justice system because they are unable to adjust adequately (Juvenile Law Center, 2015).

According to the United States Department of Veterans Affairs (2014), 60% of males and 50% of females experience trauma at least once in their lifetime. Depending on the gender, the type of trauma experienced may be different. The United States Department of Veterans Affairs (2014), reported that it is common for males to experience a disaster, accident or a physical assault while a female, is more likely to experience a sexual assault and or abused sexually as a child. In a study conducted by Smith and Saldana (2013), regarding adolescent girls involved in the criminal justice system, it was found that 93% of girls reported that they experienced sexual abuse, 93% reported they experienced physical abuse, and 90% reported that they had been exposed to an additional childhood trauma. Research on developmental pathways that led to adolescent substance use suggested that early maltreatment in childhood might set the stage for a developmental process that could lead to an increase in drug usage (Oshri, Rogosch, Burnette, & Cicchetti, 2011).

According to research, 65% to 75% of youth have one or more diagnosable psychiatric issue, and are involved with the juvenile justice system (Juvenile Law Center,

2015). Those individuals who are being incarcerated seem to have more severe types of mental illness than in the past, to include psychotic disorder and mood disorders (Aufderheide, 2014). According to the American Psychiatric Association [APA] (2013), between 2.3% and 3.9% of those incarcerated have a psychotic disorder, between 13.1% and 18.6% suffer from major depression, and between 2.1% and 4.3% suffer from bipolar disorder. The odds of a youth who is suffering from bipolar disorder is more than eight times higher for them to commit a personal crime compared to someone who does not have that disorder (Stoddard-Dare, Mallett & Boitel, 2011).

Bartol and Bartol (2012), reported that delinquents often suffer from ineffective parenting, poor school experiences, and or restricted cognitive and language development. Psychological risk factors, such as cognitive and language deficiencies, increase the risk of antisocial behavior (Ashton, 2010). Researchers have found that individuals who are being treated for antisocial behavior and conduct disorder will indicate language impairment (Ashton, 2010). Language impairment generally means that one has problems expressing themselves, and or they have trouble understanding, which could stem back as far as childhood (Bartol & Bartol, 2012). Researchers have indicated that poor language development is a significant indicator of adult criminal behavior (Bartol & Bartol, 2012). Antisocial behavior can also indicate conduct disorder, and can cause one to be socially rejected due to the lack of interpersonal skills (Hemphala & Hodgins, 2014). Youth diagnosed with conduct disorder combined with high levels of psychopathic traits tend to be insensitive to receiving punishment and often behave inappropriately despite the consequences (Frick & White, 2008). These types of

behaviors are difficult to manage causing one to be noncompliant in the home with aggressive tendencies ultimately leading to criminal behavior (Hemphala & Hodgins, 2014).

Having mental health issues leaves the question as to whether or not someone who is suffering is appropriate to be detained in a detention facility. In fact, the behaviors themselves could be a direct correlation as to why the crime was committed, as well as the inability to control their actions (Stoddard-Dare, Mallett & Boitel, 2011). The benefit of receiving psychiatric care while detained would guarantee that mental health needs are being addressed, which would ultimately illuminate other risks that could put the youth's safety at risk (Treatment Advocacy Center, 2014).

Psychiatric Stabilization

Detention is a placement where juveniles are housed pending court action. Detention is a secure facility intended for those who pose a risk to the community if released and as a form of punishment (Shelden, 1999). Detention is intended to have a deterrent effect on juveniles, but Bezruki, Varana and Hill (1999) found that the majority of juveniles who have experienced detention would return within one year. It has been recognized that most estimates regarding the number of offenders who are incarcerated and suffering from mental illness are underreported (Morgan, Flora, Kroner, Mills, Varghese & Steffan, 2013). It is a proven fact that the United States has three times more offenders with mental illness incarcerated than the number of mental patients in a psychiatric hospital (Morgan et al., 2013). When it comes to policy recommendations for the mentally ill population, there is an assumption that since mental illness is the reason

they become involved in the criminal justice system, the solution then is often psychiatric care (Skeem, Manchak, Peterson, 2011).

Receiving psychiatric care has been proven effective for individuals who suffer from mental illness (Morgan et al., 2013). When referring to psychotropic medication, very few would dispute the fact that the use of medication helps to decrease symptoms of mental illness (Morgan et al., 2013), but there are also other components that need to be incorporated for stabilization to be effective (Morgan et al., 2013). Family psychoeducation is important because not only does it helps to educate family members about the effects of mental illness, but it also teaches them how to be an empathetic support system (Morgan et al., 2013). Illness recovery and management helps the individual to be responsible for their recovery, help them to manage their illness, and to seek help when needed to ensure that they are obtaining their life goals (Morgan et al., 2013).

When determining whether someone should be placed in a psychiatric center to receive services, the individual must exhibit symptoms such as harm to self or others, whether or not they are having active symptoms, history of psychiatric care, and compliance with medication (The University of Texas Health, 2015). These three factors give one an overview as to what that person may be experiencing. Every individual is different, determining his or her length of stay at the hospital is based on stabilization, and that is determined on a case-by-case basis (The University of Texas Health, 2015). When assessing someone, they are diagnosed according to the symptoms being displayed and once they are no longer having active symptoms and their behavior has become

maladaptive to the diagnosis given, one can make the determination as to when discharge from the institution is appropriate (The University of Texas Health, 2015). Youth admitted to HCPC suffer from disorders such as anxiety, depression, bipolar disorder, schizophrenia, disruptive behavior disorder, and attention deficit/hyperactivity disorder (The University of Texas Health, 2015). Issues experienced by this population could stem from sexual, emotional or physical abuse, suicidal ideations, difficulties intellectually at school, family relationships, life-threatening situations, trauma and substance abuse (The University of Texas Health, 2015). On the unit at HCPC, youth are required to attend school, participate with group counseling, attend and participate in individual and family therapy if ordered, and they must maintain appropriate behavior in order to earn levels (The University of Texas Health, 2015). The level system at HCPC encourages youth to work the program in order to be rewarded with extra activities such as going to the gym, permission to play video games, and to go into the computer lab (The University of Texas Health, 2015). This incentive program encourages youth to be accountable for their behavior as accountability is the first step to changed behavior.

Finding effective evidence based strategies is limited which leaves clinicians searching for applicable methods for incarcerated youth to help alleviate suffering, and to ultimately reduce the possibility that they will need to return to the psychiatric center (Morgan et al., 2013). Given the extent of mental health services received, whether it is therapy based or the determination that medication is needed, there is still a number of youth who continue to commit criminal acts which in turn leads to recidivism (Petrosino, Guckenburg & Turpin-Petrosino, 2010).

Risk Factors

Several studies have acknowledged that there are many factors that influence the outcomes of youth with mental illness and criminal behavior. Age, gender, diagnosis of an antisocial personality trait, and noncompliance with therapy are among some of the findings (Harvey, Jeffreys, McNaught, Blizard & King, 2007; Raina & Lunsky, 2009; Walji, Egan, Fonseca and Huxley, 2014). There is compelling evidence that suggests even when demographic variables are accounted for, this association of risk factors are not only statically significant, but they are just as clinically and socially important enough to warrant the need for services that strive to have an impact on the individual's recovery (Walji, Egan, Fonseca and Huxley, 2014).

Age

Moffitt's developmental theory of criminal behavior places adolescents into categories based on their age when the deviant behavior began (Moffitt, Caspi, Harrington, Milne & 2002). Adolescents that became involved in criminal activity at an early age were referred to as "early starters" (Moffitt et al., 2002). Internationally, between the ages of 15 and 18 years, youth delinquency peaks (Stoddard-Dare, Mallett & Boitel, 2011). Moffitt et al., (2002) believed that childhood-onset delinquency was strongly linked to mental-health problems, psychopathic personality traits, as well as poor neurological status that began before the age of 13 years (Moffitt, Lynam & Silva, 2006).

When looking at crime, experts have acknowledged it as a young man's game (Friedman, 1994). The average age of a young criminal is 14 to 15 years of age as this age has the highest rate of arrest compared to other age groups (Roberts, 2015). In a study

conducted by Duncan, Tildesley, Duncan, and Hops (1995), they looked at juveniles who were adjudicated and found delinquent. The study found that criminal behavior is frequent among youth who committed an offense, as they are likely to reoffend (Duncan et al., 1995). One of the strongest factors associated with criminal behavior is age, and age-crime relationship is universal across all of society and racial groups (Walji, Egan, Fonseca & Huxley, 2014).

Gender

Societal perceptions and the reaction attributed to someone with mental illness is based on their gender (Davidson & Rosky, 2014). Females are more likely to receive sympathy or concern when diagnosed with a mental illness due to the gender roles that cast women in a weak and childlike manner (Davidson & Rosky, 2014). Males are viewed as aggressive and powerful, and they are perceived as violent or dangerous when they are displaying signs of mental illness (Davidson & Rosky, 2014). Statistics show that somewhere between 30 and 40 percent of all boys growing up in an urbanized area in the United States will be arrested before their 18th birthday (Roberts, 2015). It has also been found that males spend longer periods of time in a psychiatric center compared to females (Davidson & Rosky, 2014).

Research has shown that females and males are introduced to crime in different ways. A female will become involved in crime due to abuse, victimization, relationship dysfunction, low self-esteem or parental stress (Daly, 1994; Belknap, 2007), and a male will become involved due to anxiety experienced regarding their identity and self-worth (Davidson & Rosky, 2014). In a study done by Morgan, Morgan, Valuri, Ferrante, Castle

and Jablensky (2012), they found that females make up to 27.9% of psychiatric offenders when comparing them to offenders with no history of psychiatric illnesses.

According to HCJPD, 2,639 females and 9,610 males were charged with a crime in the year of 2015. There are several studies that have examined the relationship between recidivism and females, and findings from the studies suggest that a mental health diagnosis and substance abuse are contributing factors for recidivism (Vigesaa, 2013; Horton, 2011; Fedcock, Fries, & Kubiak, 2013).

Ethnicity

African Americans, mainly Black males, are the largest percentage of United States defendants who are incarcerated (Thompson, 2010). Due to the fact that this racial class is overrepresented within the criminal justice system, many times the violent behavior can be interpreted as normal due to stereotypes (Thompson, 2010). This modern trend of racism tends to look at African American behavior in a criminal aspect rather than a mental illness component (Thompson, 2010). In a study conducted by Kakade, Duarte, Xinhua, Fuller, Drucker, Hoven, and Ping (2012), they gathered data from a nationwide survey to determine arrest rates between African American and White adolescents. It was found that African American youth compared to White youth were more likely to be arrested, which was consistent with previous research (Fite, Wynn & Pardini, 2009; Kempf- Leonard, 2007).

Looking at racial differences among youth within the criminal justice system is an important aspect to consider, especially if they suffer from a mental illness, and are in need of stabilization. Rawal, Romansky, Jenuwine and Lyons (2004), found that

Caucasian youth had the highest rate of mental health services while, Hispanic youth received the least amount of services. African American youth are the most underserved as they have the highest rate of symptoms and comorbidity needs, but have the lowest rates of mental health services (Rawal et al., 2004). Different racial beliefs, in regards to mental illness, can be another cause as to why recidivism occurs. According to Stacer (2012), the African American culture is less likely to believe one is suffering from a mental illness and will decline services. Within the European American and Hispanic culture, their community is categorized as having a high level of family support, which could help lower recidivism rates.

The National Council on Crime and Delinquency (2014) conducted research and found that the majority of youth who are incarcerated are minorities. With these findings, the Juvenile Justice and Delinquency Prevention Act of 1974 made three amendments setting stipulations as to how states can obtain funding for juvenile justice initiatives (National Council on Crime and Delinquency, 2014). The first amendment required states that receive funding to allot a portion of the funding to reduce overrepresentation of youth who are incarcerated in a detention or residential facility (National Council on Crime and Delinquency, 2014). The second and third amendments required the states to focus attention on disproportionate minority confinement to include any contact the youth has with the criminal justice system (National Council on Crime and Delinquency, 2014). In a qualitative study by Kakar (2006), in-depth interviews were conducted with personnel who were involved in the juvenile justice system. The study explored factors that contribute to disproportionate minority contact. It was confirmed that

disproportionate minority contact is a pervasive and prevalent problem. Disproportionate minority contact is a problem entailing multiple factors such as societal factors, system factors, education factors, family and parental factors, economic factors and individual factors (Kakar, 2006). Disproportionate minority contact is not the end result to the issue, and in order to address and help prevent it from reoccurring, stakeholders must collaborate to help develop alternatives to juvenile detainment (Kakar, 2006).

Mental Health Diagnosis

In order to be receive a mental health diagnosis, the Diagnostic and Statistical Manual of Mental Disorders states that a mental disorder is characterized by a disturbance in a person's cognition, behavior or emotion regulation that indicates a dysfunction in the developmental, psychological and or biological mental functioning (APA, 2013). Certain types of mental health disorders are common among youth who find themselves in trouble with the law (Sarteschi, 2013). Many symptoms of the mental health disorder may increase aggression causing the youth to engage in criminal behavior (Day & Wanklyn, 2012). Among youth with mood disorders, about 10% to 25% are within the criminal justice setting (Grisso, 1998). Conduct Disorder is one of the most prevalent psychiatric disorders within the juvenile justice system (Hill & Sharp, 2015). Findings from a study done by Teplin, Abram, McClelland, Dulcan and Mericle (2002), found 24.3% of male and 28.5% of females to have met the criteria for a diagnosis of Conduct Disorder. Aggressive behavior, a criterion for conduct disorder, and impulsiveness, a component of Attention Deficit Hyperactivity Disorder, can lead a youth to ignore the consequences when responding to emotional situations (APA, 2013).

Disorders such as schizophrenia are rare among juveniles as this disorder occurs in early adulthood (Fazel & Yu, 2011).

Anxiety disorder and post-traumatic stress disorder are two disorders that are prevalent among juveniles, especially girls (Hill & Sharp, 2015). Youth within a juvenile justice system who meet criteria for a mental disorder typically meet criteria for at least two or more disorders (Sarteschi, 2013), including a substance abuse disorder. When looking at recidivism rates, substance abuse is indicated to be highly likely for one to reoffend (Castillo, & Alarid, 2011). To support a habit of substance abuse, offenders would often commit a criminal act for the sole purpose of obtaining more drugs (Hiday & Wales, 2009). The Texas Youth Commission found that 47% of youth who were committed to them were chemically dependent and 25% of youth reported themselves as frequent drug users (Texas Criminal Justice Coalition, 2011).

Criminal Offense

Snyder and Sickmund (2006) stated that offenses committed by juveniles are grouped into categories based on the law violation. A status offense includes acts committed by a juvenile such as, running away from home, not attending school, and or curfew violations (Snyder & Sickmund, 2006). According to Snyder and Sickmund (2006), when a juvenile commits any type of status offense, they are not adjudicated, but will be adjudged as a status offender. Juveniles, who commit crimes such as a drug offense, public order, crime against a person or a place, can be found guilty and adjudicated under the juvenile court of law (Snyder & Sickmund, 2006). Crimes against a person include but not limited to aggravated assault, kidnapping, violent sexual acts,

robbery, rape, harassment and reckless endangerment (Snyder & Sickmund, 2006). Trespassing, theft, burglary, arson, vandalism and motor vehicle theft are labeled as property offenses (Snyder & Sickmund, 2006). Crimes such as the unlawful manufacture, sale, transport, possession or use of a prohibited substance are categorized as a drug law violation and offenses such as disorderly conduct, weapons offenses, nonviolent sex offenses, and obstruction of justice are labeled as public order violations (Snyder & Sickmund, 2006).

The seriousness of the offense and the criminal history of the offender are two components that influence the sentencing outcome (Davidson & Rosky, 2014). The mere presence of a mental illness that enables the youth to fully understand the wrongfulness of their behavior decreases the chances that one will be found criminally responsible for their actions, resulting in one being admitted to the state hospital for rehabilitation (Davidson & Rosky, 2014).

In the year of 2010, approximately 100,000 youth were serving time in a residential placement with 26% of youth being convicted of crimes such as theft, burglary, and arson (Sedlak & Bruce, 2010). In a study done that analyzed recidivism rates of youth in the year of 2007, it was found that 47.8% of youth returned with a weapons charge, 43.5% had a controlled substance charge, 40.9% had a property charge, and 35% had a sex offense (Indiana Department of Correction, 2010). Langan and Levin (2002), conducted a study looking at recidivism rates among youth based on a violent or non-violent criminal offense. Violent offenses consisted of rape, murder, and drug offenses. Non-violent crimes consisted of burglary, theft and assault charges (Langan &

Levin, 2002). The study found that violent offenses have lower recidivism rates compared to non-violent offenses (Langan & Levin, 2002).

Length of Stay in Psychiatric Hospital

The mental health status of a juvenile offender has played a key role in the development of services attempting to divert them away from the criminal justice system (Davidson, & Rosky, 2014). Such services are mental health courts, mental health probation services, mental health aftercare, follow-up care, as well as psychiatric stabilization (Davidson, & Rosky, 2014).

The primary purpose of psychiatric stabilization is to reduce the disability that has caused the mental health difficulties (Walji, Egan, Fonseca and Huxley, 2014). By promoting recovery through evidence based psychological and pharmacological interventions (Craig, 2006), life skills that encourage effective coping skills and independence, will help one become successful in a less restrictive setting (Walji, Egan, Fonseca and Huxley, 2014). Being placed at a psychiatric in-patient setting allows the staff to support the youth when they behave in a violent manner compared to community-based programs, as early interventions help to reduce the opportunity for one to act out violently (Walji, Egan, Fonseca and Huxley, 2014). Rehabilitation programs that have high intensity therapeutic services allow for a greater outcome in psychosocial and clinical functioning (Singh, Grann & Fazel, 2011).

Youth who are presenting with mental health issues, mainly psychotic disorders, are typically young when the first episode occurs (Perkins, Gu, Boteva, & Liberman, 2005). Due to their age, one may refuse services due to poor insight, impaired social

functioning, more severe symptoms as well as a poor long-term prognosis, which could result in one having more relapses (Marshall, Lewis, Lockwood, Drake, Jones & Croudace, 2005). Psychiatric care helps to reduce the period of time that the youth's life is disrupted in hopes to help them function to the best of their ability as soon as possible (Singh, Grann & Fazel, 2011). The length of stay in a psychiatric facility is determined based on one's psychiatric needs, and discharge will be considered after they become stabilized.

Summary

Determining what factors contribute to juvenile delinquency is imperative as most adults begin their criminal involvement as young juvenile offenders (Fain, Turner & Ridgeway, 2012). Various studies have looked at criminality and mental illness among juveniles and their recidivism rates, but typically the focus is on one selective mental health issues or risk factor. This study will include all psychiatric illnesses, offense categories, as well as risk factors that could contribute to high recidivism rates in a one-study design. One reoccurring question that is continually asked is whether youth who suffer from a mental illness are more likely to recidivate back into criminal activity once they have received mental health services. Individual risk factors are relevant to juvenile recidivism, and the outcome of these factors has a direct impact on the youth's ability to be successful within the community (Sullivan & Latessa, 2011). This study acknowledged that research has shown an overlap regarding selective risk factors such as mental illness and substance abuse, but it also indicates that there is a strong need for one to determine what correlation exists between the different risk factors for each youth and

the recidivism rates after they were deemed stable by the psychiatric center. Chapter 3 includes the outline of the methodology for the study and the utilization of archival data collection.

Chapter 3: Research Method

Introduction

The purpose of this study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric care and were stabilized in Harris County when discharged. The HCPC aims to stabilize youth who are struggling with mental health issues. Studies have shown that interventions for offenders with mental illness can be effective to treat mental health symptoms and to help with coping skills and behavioral management (Morgan et al., 2013). Therefore, services and aftercare arrangements are provided to the youth and their family to help with the continuity of care once released to help support the youth's overall functioning and their needs. Researchers have indicated that there are risk factors that affect the continued involvement in criminal behavior among the juvenile population. Given that information, in this study, I explored the influence of the mental health diagnosis and lengths of stay at the psychiatric hospital upon recidivism.

This chapter includes the research design, research questions, population, procedures, and data collection. I also provide detailed information regarding the independent and dependent variables and address the threats to validity. In the final section, I discuss the ethical procedures and summarize Chapter 3.

Research Design and Rationale

The participants were youth who were sent to the HCPC to receive mental health services in January 2007 to December 2015. The aim of this study was to identify risk

factors that may be associated with recidivism while including the potential to assess covariates such as age, gender, ethnicity, and criminal offense.

Archival data can be obtained by looking at other studies conducted by researchers, or they can be obtained by looking at past patient records. For this study, data were retrieved from the HCJPD who has a unit at the HCPC. The goal is to stabilize youth so that they can be released back into the community. One advantage of using archival data is the abundant amount of information that I was able to obtain, which provided a better picture of relationships, trends, and outcomes. Archival data also allowed me to focus on the raw data, illuminating potential aspects such as changes in the participant's behavior.

This research approach was chosen as it was aligned with the focus of the study, an analysis to determine the connection between the variables in the study and recidivism. Once the youth is stable for discharge and released from the psychiatric center, if they are rearrested and detained in the detention center for a misdemeanor or higher offence within 365 days of leaving the psychiatric facility, recidivism was determined.

The findings from this study aid in the effort to reduce recidivism rates by providing data to support the risk factors found to be higher in recidivism rates in hopes to develop programs geared to this vulnerable population.

Methodology

Population and Sample Strategy

The participants who were included in this study consisted of youth between the ages of 11 and 17 who were sent to the HCPC for stabilization between January 2007 to December 2015. The population included both male and female youth who were detained in the Harris County Juvenile Detention with ethnicity being identified as White, Black, Hispanic, or other. Using a series of preliminary analyses, there were a total of four potential confounding variables or covariates that may be significantly related to the risk of being rearrested and detained in the juvenile detention center within 365 days of being released. These covariates may include none, one, two, three, or all four of the following: (a) age, (b) gender, (c) ethnicity, and (d) type of criminal offense. Only those found to be statistically related to the outcome of recidivating within 365 days, were used as covariates in the final assessment of risk factors.

To determine the number of participants necessary in the study, each possible analysis was assessed to determine which required the largest sample size. In response to the third research question, a binary logistic regression was conducted, which included as few as two (i.e., in the case that only the independent variables are included) or as many as six (i.e., in the case that all covariates are included) predictor variables. Because the outcome variable is binary (i.e., either did or did not reenter the juvenile correction system within 365 days) a binary logistic regression was the only available regression analysis (LeBlanc & Fitzgerald, 2000). After assessing each of the analyses, the binary

logistic regression was found to have the largest sample size requirement and was thus used to calculate a minimum sample size.

G*Power does not allow for the direct assessment of the binary logistic regression model, but Hsieh, Block, and Larsen (1998) recommended guidelines for sample size based on an alpha of .05, a power of .80, and a medium effect size. Using these parameters, Hsieh et al. recommended a sample of approximately 300 participants; ideally, an equal amount should be in either group of the dependent variable. To confirm this suggestion, the guidelines from LeBlanc and Fitzgerald (2000) were assessed. Using these guidelines, these authors suggested approximately 30 participants per predictor variable in the analysis. Based on the possibility of a final model with six predictors, approximately 180 (6*30) participants were sought.

Variables

In this study, I used archival data that were documented in a database used by the HCJPD. Information acquired from this database was obtained as it pertains to mental health diagnosis, length of stay in the psychiatric stabilization program, age, gender, ethnicity, and criminal offense. Information regarding being rearrested for a misdemeanor or higher offence at the Harris County Juvenile Detention Center within 365 of release from the psychiatric facility was included in the study.

Independent Variables

The independent variables for this study included mental health diagnosis and length of stay at the psychiatric center.

- Mental health diagnosis-- defined under the DSM-IV-TR criteria and documented in the database. Each youth has a diagnosis upon admittance into the program and then given a diagnosis when they discharge from the program. For this study, the diagnosis at discharge was the one used. For statistical purposes, this binary variable included all mental health diagnoses.
- Length of stay at the psychiatric center-- defined as the exact number of days the participant was placed at the psychiatric center.

Covariates

The possible covariates for this study included age, gender, ethnicity, and criminal offense.

- Age-- defined as the participant's age at discharge and documented in the database. This was represented as a continuous variable.
- Gender-- defined as the participant's sex that was documented in the database. The variable was divided into two categories: male and female.
- Ethnicity-- defined as the participant's race that was documented in the database. The variable was divided into four categories: White, Black, Hispanic, or other.
- Criminal offense-- defined by the Texas Legislature and was documented in the database. For statistical purposes, this variable was divided into two categories: misdemeanor or felony.

Dependent Variable

The dependent variable for this study was recidivism. Recidivism, a binary variable, is defined as any youth who was rearrested for a misdemeanor or higher offence

within 365 days of discharge from the psychiatric center between January 2007 to December 2015. These archived data were obtained from the HCJPD Database. The participants who were detained in the Juvenile Harris County Detention Center within 365 days of discharged from the psychiatric center were coded with a "1". The participants from the archived data who had not been detained after they were discharged from the psychiatric center were coded with a "0".

Procedures Using Archival Data

Walden International Review Board approval was received before data were collected. Harris County International Review Board granted approval for this study to be conducted. A request was made to HCJPD for the data used in the study. Archived data used for this study were located within a database specifically for youth who were sent over to the HCPC. To obtain recidivism rates, these archived data were located in another database used by Harris County Juvenile Probation. Between the dates of January 2007 to December 2015, data regarding participants who were discharged from HCPC were obtained and entered into the Harris County Juvenile Probation database. These data were coded into two groups: (a) participants who were detained within that time frame, (b) participants who were not detained. For those who were detained, archival data stored in the HCPC database were used to gather the identified risk factors to include age, gender, ethnicity, mental health diagnosis, criminal offense, and length of stay at the psychiatric hospital.

Due to the use of archived data, I was unable to identify any of the participants. Participants were coded with a numerical number; therefore, informed consent was not

required. The data received were stored on a password-protected thumb-drive and will be kept for a minimum of 5 years. When not in use, the thumb-drive is stored in a locked file cabinet located at my personal residence. After 5 years, the data will be removed from the device and the thumb-drive will be physically destroyed and disposed of. The Statistical Package for the Social Sciences was used to analyze the data and to answer the research questions.

Research Questions and Hypotheses

Research Question 1

Is the type of mental health diagnosis significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center?

$H1_0$: The type of mental health diagnosis is not significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

$H1_a$: The type of mental health diagnosis is significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

Research Question 2

Is there a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not?

$H2_0$: There is no significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

$H2_a$: There is a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

Research Question 3

Does length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days, beyond the influence of statistically significant covariates?

$H3_0$: Length of stay at the psychiatric hospital and mental health diagnosis do not significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

$H3_a$: Length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

Data Analysis Plan

The purpose of this study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric care and were stabilized in Harris County when discharged. To answer Research Questions 1 and 2, one chi square analysis and one *t* test was conducted to examine the association between reentry into to

the juvenile correction system within 365 days and the following independent variables: (a) mental health diagnosis and (b) length of stay at the psychiatric hospital. These variables represent the independent variables of Research Questions 1 and 2. A *t* test was conducted for the continuous independent variable of length of stay, while a chi square analysis was conducted for the categorical independent variable of mental health diagnosis. Among the independent variables in Research Questions 1 and 2, significant relationships with instances of being rearrested and detained in the juvenile detention center for a misdemeanor or higher offence within 365 days indicated that the variable should be used in the final binary logistic regression model used to assess Research Question 3.

In addition to these two independent variables, a preliminary analysis was conducted to examine potential covariates for their applicability to the final analysis used for research question. In these preliminary analyses, the type of criminal offense, ethnicity, age, and gender was examined for their relationship with the outcome variable (i.e., reentry into to the juvenile correction system within 365 days). Similar to the examination of research questions one and two, the continuous variable of age was examined using a *t* test, and the type of criminal offense, gender, and participant ethnicity was examined with one chi square analysis each. Any significant covariate was included in the final regression model along with either of the significant independent variables identified in research questions one and two. In this final model, each significant variable was entered simultaneously using the enter method.

The binary logistic regression analysis is a predictive analysis of the likelihood of membership in one of the two groups based on the logit combination of predictor variable values (Stevens, 2015). The overall binary logistic model is tested for significance using a χ^2 coefficient rather than the *F* associated with linear regression, but differs from the chi square analysis in its ability to include multiple independent variables in one predictive equation (LeBlanc & Fitzgerald, 2000). Examination of the Nagelkerke R^2 will assess the percent of variance in recidivism rates accounted for by the combination of predictors, but is only meaningful if the model is significantly predictive. Predicted probabilities of recidivism were determined by Exp (β) for each predictor to determine which predictor variables account for an increased or decreased rate of placement in the recidivism group (Tabachnick & Fidell, 2014). For categorical variables, dummy coding was used to create either one, or a series of dichotomous variables, as necessary in any regression analysis.

In assessing the hypotheses, all significant predictors were entered into the model simultaneously. The strength of entering all significant predictor variables into the binary logistic regression model simultaneously lies in its ability to control for each predictor in the model when values for any particular predictor are assessed (Tabachnick & Fidell, 2014). This same rationale applies to any significant covariate that was entered into the final model. This allowed me to determine which variables actually explain the odds of recidivating, even when two variables provide similar data and could otherwise be incorrectly assessed as both having an individual relationship with odds of recidivating if assessed without controlling for one another's effect. It is similar to the interpretation of

multiple linear regression, which is an analysis that shares the correlational nature of the binary logistic regression and allows each predictor to be examined while taking into account the influence of any other variables in the model (Stevens, 2015).

Threats to Validity

The selection of participants who were included in this study consisted of youth who were detained in the juvenile detention center and transferred over to the psychiatric center. Youth who were selected for the program were referred by staff employed at the agency such as judges, psychological staff, psychiatrists and health services personnel. Selection is done on a case-by-case basis based on the therapeutic evaluation with the youth, psychological screening and mental health history. This could present as a threat to validity as the individuals making the referral may not be trained clinicians, but they all are required to have a Bachelors or higher degree, and must adhere to the mandatory state training requirements and departmental procedures. Despite the selection of participants for the program, HCJPD is one of the largest probation departments in the state of Texas. This allows for a greater number of referrals to be made for the psychiatric center, ensuring that the youth who are selected for the program are more therapeutically appropriate as opposed to pure random selection. Since this study used case records of youth, this threat will not affect the results obtained from this study.

Ethical Procedures

The Harris County Institutional Review Board and Walden University's Institutional Review Board granted approval, approval number 12-27-16-0405336, prior to this study being conducted. Due to the use of archived data, participant's consent was

not needed for this study. This researcher followed the Walden University's ethical protection of the participant's protocol to protect them from any harm. Numerical numbers identified the participants and no personal identification was documented**.**

Summary

This quantitative study utilized archival data obtained from the HCJPD database. Data collected covered an eight-year period only pertaining to the youth who were released from the psychiatric hospital as stable for discharge and then rearrested and detained by the HCJPD. Participants' identification was removed to avoid any confidentiality concerns.

Recidivism was the dependent variable being examined in this study to include youth who had been detained for a misdemeanor or higher offence. There were several independent variables that were being investigated to determine the correlation it may have upon recidivism rates. The independent variables consisted of completion of a psychiatric stabilization program, mental health diagnosis and length of stay at the psychiatric hospital. Chapter 4 includes a detailed description of the study, data collection, and the results of the study**.**

Chapter 4: Results

Introduction

In this quantitative study, I evaluated the relationship among juvenile recidivism and the independent variables of mental health diagnosis and length of stay at the psychiatric center, while also assessing covariates of age, gender, ethnicity, and criminal offense. Recidivism was the dependent variable investigated in this study. The purpose of this study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric care and were stabilized in Harris County when discharged.

Demographic Information

A majority of the sample was male (62.6%), and nearly half Black (45.4%), with the other half consisting of nearly equal parts Latino (27.9%) and White (25.9%). Mental health diagnoses were determined upon release and varied greatly. To create a variable that could be used in analysis and described accurately, the diagnoses were categorized into one of five possible groupings, including behavior disorders, mood disorders, substance abuse disorders, thought disorders, and other disorders. This categorization revealed that a majority was diagnosed with mood disorders (62.3%), while 26.4% were diagnosed with behavior disorders, and the remaining 5.9% either had a substance abuse disorder (1.7%), a thought disorder (3.2%), or some other form of mental health diagnosis (1.0%). Within the sample, the average age at release was 15.14 years (*SD* = 1.23), though ages ranged from 11 to 17 at the time of release. The sample had spent between 2 and 182 months in the facility, with an average length of stay of 39.78 (*SD* = 23.97). Although the sample consisted of either those who did not recidivate, or those

who did within 365 days, many of those in the recidivism group recidivated before 365 days; on average, those who recidivated did so around 145.58 days from release (*SD* = 94.76). Categorical descriptors can be seen in Table 1, while continuous descriptors are presented in Table 2.

Table 1

Demographic Information for Final Sample's Categorical Descriptors

Demographic	*n*	%
Sex		
Female	375	37.4
Male	627	62.6
Race		
Black	455	45.4
Latino	280	27.9
White	260	25.9
Other	7	0.7
Mental health diagnosis		
Behavior disorder	265	26.4
Mood disorder	614	62.3
Substance abuse disorder	17	1.7
Thought disorder	32	3.2
Other	10	1.0
Recidivated within 365 days		
No	857	85.5
Yes	145	14.5
Recidivism offense (*n* = 145)		
Misdemeanor	99	9.9
Felony	46	4.6

Table 2

Demographic Information for Final Sample's Continuous Descriptors

Demographic	Min.	Max.	*M*	*SD*
Age at release (Years)	11	17	15.14	1.23
Time in psychiatric facility (Months)	2	182	39.78	23.97
Days from release to recidivism (n = 145)	5	365	145.58	94.76

Data Analysis

Prior to the analyses relevant to the research questions, a series of preliminary analyses were conducted to determine the existence of covariates. The main outcome of the study was recidivism within 365 days, and potential covariates included age at release, sex, race, and criminal offense. To examine these variables, a series of different analyses were conducted, with the specific analysis dependent on the level of measurement for the variable of interest. For continuous variables (i.e., age at release), a *t* test was appropriate, while categorical variables (i.e., sex and race) required chi square analysis. Criminal offense was also originally intended to act as a covariate; however, it was found that only criminal offenses for the recidivism offense were available. Thus, only those who recidivated had a criminal offense, and this could not be used as a covariate as there were no data for the group who did not recidivate.

Results of the *t* test for age at release were statistically significant, $t(1000) = 6.85$, $p < .001$, indicating that it would need to be used as a covariate in the analysis predicting recidivism. The chi square analysis of sex to be used as a covariate predicting recidivism within 365 days was also statistically significant $\chi^2(1) = 4.37$, $p = .037$, meaning that sex

should also be used as a covariate. The final analysis was conducted as a chi square analysis on race, which was also statistically significant $\chi^2(2) = 6.31$, $p = .043$, and all three variables were determined to be necessary covariates when predicting recidivism within 365 days. As such, these covariates were reserved for the multivariate analysis of recidivism in Research Question 3.

Research Question 1

Is the type of mental health diagnosis significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center?

$H1_0$: The type of mental health diagnosis is not significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

$H1_a$: The type of mental health diagnosis is significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

The first research question required analysis of mental health diagnosis, which was organized based on the primary diagnosis into one of five categories, including behavior disorder, mood disorder, substance abuse disorder, thought disorder, and other. However, the categories of other and substance abuse had less than 30 participants in either category, which would have resulted in several cells with less than five observations; this tends to result in invalid findings when the proportion of cells with five or fewer observations is greater than 25% (Stevens, 2015), and the mental health

diagnosis was collapsed accordingly. A Combination of these categories resulted in four total diagnoses in the analysis. The chi-square for this analysis resulted in a four by two crosstabulation, and thus had three degrees of freedom. Based on the nonparametric nature of this analysis, no specific assumptions needed to be assessed.

Results of the chi square analysis were statistically nonsignificant, $\chi^2(3) = 3.59$, $p = .309$, indicating that recidivism within 365 days was not associated with mental health diagnosis on release. As seen in Table 3, the observed and expected count of participants in each cell were widely similar and exemplified the findings based on the test statistic and *p* value and the failure to reject the null hypothesis. As such, mental health diagnosis was not considered for use in the analysis of Research Question 3.

Table 3

Chi Square Analysis of Mental Health Diagnosis and Recidivism

Recidivism within 365 days	Behavior disorder	Mood disorder	Other	Thought disorder
No	219 [228]	536 [528.2]	24 [23.2]	28 [27.5]
Yes	46 [37]	78 [85.8]	3 [3.8]	4 [4.5]

Note. $\chi^2(3) = 3.59$, $p = .309$. Bracketed values represent the expected count for each cell.

Research Question 2

Is there a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not?

$H2_0$: There is no significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

$H2_a$: There is a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

As Research Question 2 consisted of an evaluation of differences in time spent in psychiatric care between those who did and did not recidivate within 365 days, a *t* test was conducted. In this analysis, the continuous dependent variable was the amount of time (in months) spent in the psychiatric facility, while the dichotomous independent variable indicated whether participants did or did not recidivate within 365 days. Prior to analysis, the assumptions of the *t* test were assessed. For a *t* test to be as accurate as possible, the dependent variable must be assumed to follow a normal distribution, and variances between the two groups of the independent variable should be assumed to be nearly equal. To test the normality of the dependent variable, a one-sample KS test was conducted. Although this test indicated that the amount of time spent in the facility was not likely to be normal, deviations from normality are typically not problematic with a sufficiently large sample (i.e., $n > 50$; Stevens, 2015). As the sample consisted of 1,002 observations, this was not considered to be an issue. Next, the assumption of equal variances was assessed using Levene's test. Results of this test indicated that variances for both groups were statistically similar, and the assumption was met.

Results of the *t* test were statistically nonsignificant, $t(1000) = -0.46$, $p = .647$, suggesting that there was statistically no significant difference in the amount of time in the facility between those who did and did not recidivate within 365 days. Based on these findings, the null hypothesis could not be rejected, and time spent in the facility was rejected for use as a predictor in the final analysis. Table 4 displays the findings of this analysis.

Table 4

Independent Samples t Test for Time Spent in Psychiatric Care by Recidivism Within 365 Days

Source	*t*	*df*	*p*	Mean difference
Time spent in facility	-0.46	1000	.647	0.99

Research Question 3

Does length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days, beyond the influence of statistically significant covariates?

$H3_0$: Length of stay at the psychiatric hospital and mental health diagnosis do not significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

$H3_a$: Length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates.

The analysis of Research Question 3 was based on the previous analyses. As both length of stay and mental health diagnosis were already found to have statistically no significant relationship with recidivism, the null hypothesis cannot be rejected. However, several covariates were identified and may still be useful in predicting the risk of reentry into the detention center within 365 days. To retain this predictive analysis, the covariates of age, sex, and race were entered into a binary logistic regression and used to predict instances of recidivism within 365 days. Similar to the chi-square, the binary logistic regression is a nonparametric analysis and does not require extensive assumption testing. However, the categorical variable of race was dummy coded into a series of binary variables, as necessary in any regression analysis. Sex was treated as a dummy coded variable, as it was already binary.

Results of the binary logistic regression were statistically significant, $\chi^2(4) = 54.19$, $p < .001$, indicating that a logit combination of age at release, sex, and race could accurately predict the likelihood of participants recidivating. Examination of a classification table (see Table 5) indicated that 85.4% of the participants in the sample were correctly predicted using the logistic regression model. Examination of the *OR*s indicated that there was an inverse relationship between age and likelihood of recidivating ($p < .001$, $OR = 0.63$), while there was a positive relationship between sex and the likelihood of recidivating (p .014, $OR = 1.64$). Because sex was coded with males as 1, this indicated that males were more likely to recidivate than females. Further, the dummy coded variable of race was only statistically significant for the category of Black ($p = .013$, $OR = 1.84$), indicating that Black participants were more likely than other races

to recidivate. Thus, within the sample, younger Black males were the most likely to recidivate, while older non-Black females were the least likely. Findings for each predictor are presented in Table 6.

Table 5

Classification Table for Logistic Regression Predicting Recidivism

		Predicted		
		Recidivated within 365 days		
Observed		No	Yes	Percent correct
Recidivated within 365 days				
	No	850	1	99.9
	Yes	144	0	0.0
Overall Percentage				85.4

Table 6

Findings for Each Predictor for Logistic Regression Predicting Recidivism

							C.I. for O.R.	
Variables	*B*	S.E.	Wald	*df*	*p*	O.R.	Lower	Upper
Age at release	-0.466	0.072	42.26	1	.001	0.627	0.545	0.722
Sex	0.494	0.202	6.005	1	.014	1.639	1.104	2.434
Race (Black)	0.607	0.243	6.22	1	.013	1.835	1.139	2.956
Race (Latino)	0.265	0.274	0.934	1	.334	1.303	0.762	2.229

Summary

Chapter 4 consisted of a series of analyses focused on determining factors related to recidivism within 365 days of release from a psychiatric care facility. Preliminary analysis suggested a relationship between sex, race, and age at release and the act of recidivating within 365 days. Even though Research Questions 1 and 2 did not result in a

rejection of the null hypothesis (i.e., mental health diagnosis and time spent in the facility were not related to recidivism), Research Question 3 was still assessed using the statistically significant covariates from the previous analyses. This analysis allowed me to examine the specific effects of covariates in terms of each covariate's unique influence on the odds of recidivism. Results showed an individual link between age, sex, and race with recidivism even when controlling for the other extant factors, indicating that these variables all had a unique influence on the likeliness to recidivate. Findings indicated that younger participants were more likely to recidivate than their older counterparts, as were males, and those who identified as Black.

Chapter 5 consists of an interpretation of the findings, and I review the limitations of the study. In addition, Chapter 5 includes a discussion of the theories guiding the study, and how the results confirm or deny the aspects of the theory that lead to the central research questions. In the following chapter, I then provide recommendations for future researchers who plan to expand on the present findings and address implications for the body of knowledge and social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to identify factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County. The juvenile justice system has been faced with providing mental health services for juveniles in hopes of reducing recidivism, but the rate of continued criminal behavior continues to be an ongoing problem. In this study, I examined how many juveniles are rearrested after being deemed stable for discharge from a psychiatric center, and what risk factors lead to a higher rate of recidivism. This study supported previous researchers who found risk factors to be associated with recidivism among juveniles. Archived data from the HCJPD, which has a psychiatric unit for juveniles suffering from mental illness, were used. Previous literature has tended to focus on recidivism either before or after psychiatric care in relation to criminal recidivism among juveniles. This study is among the first to address recidivism regarding juveniles who are exclusively placed in a mental health facility after being detained for a criminal offense.

Childhood traumas are believed to be the reason criminal behavior begins in youth (Bartol, 2002). The experiences one has at a younger age and environmental upbringing impacts adulthood and mental processes (Freud, 1915). In this chapter, I discuss the findings of this study. A review of the limitations from the study is addressed. I also make recommendations for future research.

Interpretation of the Findings

This research was conducted to identify factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County. Based on the factors found to be relevant, the goal was to develop future programs that could potentially reduce the risk of recidivism. I found that simple demographics such as age, gender, and race were strong predictors for recidivism. The findings from this research study also indicated that having a mental illness does not have any bearing on recidivism.

Research Question 1

Research Question 1 aimed to determine whether a mental health diagnosis has an association with reentry into a juvenile justice detention center for misdemeanor or higher offense within 365 days of the juvenile leaving the psychiatric facility. The null hypothesis ($H1_0$) stated that the type of mental health diagnosis is not significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center. The alternative hypothesis ($H1_a$) stated that the type of mental health diagnosis is significantly associated with reentry into a juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center.

Having a mental illness may contribute to reentry into a detention facility, but the type of the mental illness is statistically nonsignificant. Previous research on criminal behavior among juveniles found that involvement within the criminal justice system is much higher for those with serious mental illness than the general population (Aufderheide, 2014; Fisher et al., 2011; Stoddard-Dare et al., 2011). In this sample, 219

juveniles with a behavior disorder did not recidivate, and 46 with the same disorder did. Juveniles with a mood disorder had a greater percentage of those who did not recidivate, with 536 not recidivating and only 78 who did. This study differed from previous studies as I found that mental health diagnosis was statistically nonsignificant when associated with recidivism within 365 days of release.

Research Question 2

The purpose of Research Question 2 was to evaluate if length of stay at a psychiatric center is significant among juveniles who reentered the juvenile justice center within 365 days of release. The null hypothesis ($H2_0$) stated that there is no significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not. The alternative hypothesis ($H2_a$) stated that there is a significant difference in the length of stay between juveniles who reentered the juvenile detention center for a misdemeanor or higher offense within 365 days of leaving the psychiatric center and those who did not.

In this study, I found no statistical significance for time a juvenile spent in the psychiatric center. Van der Put et al. (2012) found that the longer a youth was in treatment, the higher their recidivism rate was. A possible explanation for this could be that treatment was extended due to the desired outcome not being met. Other studies have shown that the longer the treatment period, the more effectiveness of treatment is reduced (Dekovic et al., 2011; van der Put et al., 2012).

Research Question 3

Research Question 3 was a continuation of Research Questions 1 and 2 but it also included covariates that were identified as potential factors associated with recidivism. The null hypothesis ($H3_0$) stated length of stay at the psychiatric hospital and mental health diagnosis do not significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of statistically significant covariates. The alternative hypothesis ($H3_a$) stated length of stay at the psychiatric hospital and mental health diagnosis significantly predict the risk of reentry into the detention center for a misdemeanor or higher offense within 365 days beyond the influence of significant covariates.

It was found that the older the juvenile, the less likely they are to recidivate, regardless of the amount of time they in the psychiatric hospital. This was consistent with previous research, which found that younger juveniles were more likely to recidivate (Christiansen & Vincent, 2013; Mudler, Brand, Bullens, & van Marle, 2011). In this study, I found that males were more likely to recidivate compared to females; however, several studies indicated that the number of females involved in the criminal justice system is steadily increasing (Becker, Kerig, Lim, & Ezechukwu, 2012; Tripodi, Bledsoe, Kim, & Bender, 2011). Black juveniles were found to recidivate at a higher rate than their Caucasian peers. When looking at other studies, this was found to be comparable as research indicated that Black juveniles, also referred to as African American, have high rates of recidivism **(**Fite et al., 2009; Kakade et al., 2012; Kempf- Leonard, 2007;

Thompson, 2010). I also found that older non-Black females were less likely to recidivate.

Limitations of the Study

In this study, I intended to identify factors that increase the risk of recidivism among juveniles who have received psychiatric stabilization in Harris County. This study included one detention center and one psychiatric hospital unit. The psychiatric hospital used in this study does not provide treatment services, as the purpose of the program is to stabilize youth. Once stabilized, the juvenile is eligible for discharge from the program and released. The services provided to the juvenile while at the psychiatric hospital are only temporary, and the length of stay is determined on an individualized basis. Once released, aftercare services are recommended, but there is not a guarantee that the juvenile will be compliant and continue with outpatient treatment.

Using recidivism, as the dependent variable is a limitation of this study, as not all youth who commit an offence will be brought to the detention center and detained. It should also be noted that there are instances when a juvenile is transported to detention for a new offense but is released prior to being detained. Violation of probation and technical violations were not included in this study for various reasons. Juveniles are supervised by probation officers, and there is evidence that suggests recidivism can be related to system bias, such as the lack of experience an officer possesses to effectively supervise juveniles, the probation officer's own personal bias, as well as officer stigma (Skeem et al., 2011). A major reason that violations were not included in this study was the absence of external factors and the effect they have on juvenile recidivism.

Criminogenic risk factors are an important aspect to assess when examining recidivism as it has been found that dynamic and static factors impact the rates of recidivism among juveniles involved in the criminal justice system (Kinard & Johnson, 2014). This is a significant limitation within this study as external factors could directly result in continued criminal behavior. In this study, I did not consider external factors including childhood upbringing, family support, and socioeconomic status. Information on the juveniles' use of mental health services after they were released was not accounted for, nor was compliance with medication. These issues have been found to have a great impact on the juvenile's level of continued criminal involvement (Kinard & Johnson, 2014). Given that, I used archived data with the juveniles' identifying information removed, the ability to control for external factors was not an option.

Recommendations

Based upon the results found in this study, there are several recommendations that can be made to benefit juveniles involved in the criminal justice system who are suffering from a mental illness. While psychiatric care helps to stabilize youth, future studies can look at treatment programs targeted at treating juveniles' specific needs. The overall goal of treatment programs is to focus on the needs of the individual, with hopes that it will help them from becoming involved in continued criminal behavior.

Another recommendation for future studies is to explore what impact family, social, and economic influences have on juvenile recidivism. Information regarding the use of mental health services and medication compliance once released could be a factor in the likelihood of being rearrested. There are criminological theories that link social and

economic influences with mental illness and criminal behavior. It is suggested that people with mental illness engage in criminal behavior not because of mental illness but because of socioeconomic status (Skeem et al., 2011). Poverty causes individuals to remain in areas where there is crime, illegal substances, victimization, and health burdens (Skeem et al., 2011). Researchers have also suggested that there are four major factors that contribute to continued criminal behavior: "An established history of benefitting from criminal activity, a social environment that encourages and tolerates crime and criminals, personal attitudes and values supportive of criminal behavior, and a personality style that finds impulsive high-risk behavior rewarding" (Bonta et al., 1998, p. 138). A more in-depth look at these factors and their relationship with continued criminal behavior should be investigated as they relate to juvenile recidivism.

Implications for Social Change

Past researchers have placed an emphasis on societal factors with the notion that criminal behavior is learned at an early age. By targeting parental behaviors, cognitive skills, and socially disruptive behaviors, prevention efforts will be amenable to the intervention of risk factors found to be statistically significant in this study. The focus of the risk factors and other societal factors may reduce childhood conducts, which may reduce or prevent juvenile delinquency. There have been programs found to be helpful when attempting to prevent continued criminal behavior, which include multisystematic therapy and functional family therapy. These programs have not been found to eliminate criminal behavior or recidivism among juveniles, but they have been found to positively affect juvenile behavior and recidivism (Sawyer & Borduin, 2011). It will be beneficial

for clinicians to focus on ways to improve juveniles' mental health and personal trajectories to reduce delinquency through targeting juveniles' specific and individual needs.

Studies have shown that aftercare and effective follow-up upon release from probation is essential to successful juvenile stabilization. Juveniles may enter treatment and do quite well, but the problem arises when they make little effort if any to continue with treatment after release. When juveniles are transitioning back into the community, assistance is needed to safeguard all the skills they learned in treatment. Probation officers often have a high caseload due to the number of juveniles who are assigned to them, and this makes it difficult for them to closely monitor each juvenile. Researchers have advocated for probation and for officers working with juveniles to assist in their healthy development (Trotter & Evans, 2012). For example, probation officers who can encourage juveniles while still holding them accountable helps them to be in control over their decisions and life. When officers have sufficient time to supervise and interact with the juvenile, positive outcomes are more likely to occur (Umamaheswar, 2013). Parents are also a factor to consider, as their assistance is needed to ensure that the juvenile is supported.

Conclusion

In this study, I found that age, gender, and race are factors when looking at juvenile recidivism. Mental illness and length of stay in the psychiatric center were also measured. Although I did not find these variables to be a viable factor when looking at continued criminal behavior among juveniles who are stabilized at the psychiatric center,

ongoing mental health treatment is necessary for juveniles who need those services. Mental health services that treat juveniles who present with challenges to the community and societal institutions is essential to the juveniles' well being. Interventions specifically designed to meet the criminal justice and mental health needs of juvenile offenders have been found to reduce criminal recidivism (Morgan et al., 2012). Understanding the problems that juveniles face would be beneficial for the development and implementation of programs, which target the specific risk factors to reduce the continued criminal behavior among this vulnerable population.

References

Abramsky, S., & Fellner, J. (2003). *U.S. prisons and offenders with mental illness.* New York, NY: Human Rights Watch.

Aichorn, A. (1935). Wayward youth. *American Journal of Psychiatry*, *92*(4), 998-a-999. doi:org/10.1176/ajp.92.4.998-a

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (2014). *Patterns of attachment: A psychological study of the strange situation.* Florence, KY: Psychological Press.

American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.

American Society of Criminology. (2013). *Critical criminal justice issues*. Retrieved from https://www.ncjrs.gov/pdffiles/158837.pdf

Ashton, R. (2010). Beyond shaken baby syndrome: What influences the outcomes for infants following traumatic brain injury? *Journal of Child Psychology and Psychiatry*, *51* (9), 967-980.

Aufderheide, D. (2014). *Mental illness in America's jail and prisons: Toward a public safety/public health model*. Received from http://healthaffairs.org/blog/2014/04/01/mental-illness-in-americas-jails-and-prisons-toward-a-public-safetypublic-health-model/

Barney, S., Corser, G., & White, L. (2010). Service-learning with the mentally ill: Softening the stigma. *Michigan Journal of Community Service Learning*. Retrieved from http://hdl.handle.net/2027/spo.3239521.0016.205

Barrett, D., Katsiyannis, A., Zhang, D., & Zhang, D. (2014). Deliquency and recidivism:

A multicohort, matched-control study of the role of early adverse experiences, mental health problems, and disabilities. *Journal of Emotional and Behavioral Disorders, 22*(1), 3-15. doi:10.1177/1063426612470514.

Bartol, C. (2002). *Criminal behavior: A psychological approach*. Upper Saddle River, NJ: Prentice-Hall.

Bartol, C.R., & Bartol, A.M. (2012). *Introduction to forensic psychology: Research and application*. Thousands Oaks, CA: Sage Productions.

Becker, S., Kerig, P., Lim, J., & Ezechukwu, R. (2012). Predictors of recidivism among delinquent youth: Interrelations among ethnicity, gender, age, mental health problems, and posttraumatic stress. *Journal of Child & Adolescent Trauma*, *5*,145-160. doi:10.1080/19361521.2012.671798

Belknap, J. (2007). *The invisible woman: Gender, crime, and justice* (3rd edition). Belmont, CA: Wadsworth Publishing Company.

Bezruki, D., Varana, D., & Hill, C. (1999). *Secure juvenile detention: An evaluation*. Madison, WI: Legislative Audit Bureau. Retrieved from http://legis.wisconsin.gov/lab/reports/99-13full.pdf

Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin, 123*(2), 123-142. doi:10.1037/0033-2909.123.2.123

Bowlby, J. (1944). Forty-four juvenile thieves: Their characters and home life. *International Journal of Psychoanalysis, 25*(19-52), 107-127.

Bureau of Justice Statistics. (2009). *Adult correctional populations, 1980-2007*.

Retrieved from http://www.ojp.usdoj.gov/bjs/glance/corr2.htm.

Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review, 106*, 676-713. http://dx.doi.org/10.1037/0033-295X.106.4.676

Castillo, E. D., & Alarid, L. F. (2011). Factors associated with recidivism among offenders with mental illness. *International Journal of Offender Therapy and Comparative Criminology, 55*, 98-117. https://doi.org/10.1177/0306624X09359502

Census Bureau. (2014). *Annual estimates of the resident population by sex, age, race, and hispanic origin for the united states and states: April 1, 2010 to July 1, 2013*. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

Christiansen, A. K., & Vincent, J. P. (2013). Characterization and prediction of sexual and nonsexual recidivism among adjudicated juvenile sex offenders. *Behavioral Sciences and the Law, 31*(4), 506-29. doi:10.1002/bsl.2070

Cochran, J. (2104). Breaches in the wall: Imprisonment, social support, and recidivism. *Journal of Research in Crime and Delinquency*, *51*(2), 200-229. http://doi.org/10.1177/0022427813497963

Colins, L., Vermeiren, R., Vreughenhil, C., VanDenBrink, W., Doreleijers, T., & Broekaert, E. (2010). Psychiatric disorders in detained male adolescents: A systematic literature review. *Canadian Journal of Psychiatry, 55*(4), 255–263.

https://doi.org/10.1177/070674371005500409

Colins, O., Vermeiren, R., Vahl, P., Markus, M., Broekaert, E., & Doreleijers, T. (2011). Psychiatric disorder in detained male adolescents as risk factor for serious recidivism. *Canadian Journal of Psychiatry* / La Revue Canadienne De Psychiatrie, *56*(1), 44-50. https://doi.org/10.1177/070674371105600108

Cook, A. S. (2010). *Complex trauma in children and early adolescents*. Retrieved from www.athealth.com/consumer/disorders/complextrauma.html

Council of State Governments. (2002). *Criminal justice/mental health consensus project*. Retrieved from http://www.consensusproject.org

Craig, T. (2006). What is psychiatric rehabilitation. in G. Roberts, S. Davenport, F. Holloway, & T. Tatton. (Eds.), *Enabling recovery: The principles and practice of rehabilitation psychiatry*. (pp. 3-17). Gaskell, Trowbridge.

Cropsey, K. L., Weaver, M. F., & Dupre, M. A. (2008). Predictors of involvement in the juvenile justice system among psychiatric hospitalized adolescents. *Addictive Behaviors, 33*, 942– 948. doi: 10.1016/j.addbeh.2008.02.012

Daly, K. (1994). *Gender, crime, and punishment: Is justice blind, or are men and women offenders treated differently by the courts?* New Haven, CT: Yale University Press.

Davidson, M. L., & Rosky, J. W. (2015). Dangerousness or diminished capacity? Exploring the association of gender and mental illness with violent offense sentence length. *American Journal of Criminal Justice, 40*(2), 353-376. doi: 10.1007/s12103-014-9267-1

Day, D., & Wanklyn, S. (2012). *Identification and operationalization of the major risk factors for antisocial and delinquent behaviour among children and youth*. Retrieved from www.publicsafety.gc.ca/ncpc

Dekovic, M., Slagt, M. I., Asscher, J. J., Boendermaker, L., Eichelsheim, V. I., & Prinzie, P. (2011). Effects of early prevention programs on adult criminal offending: A meta-analysis. *Clinical Psychology Review, 31*, 532-544. https://doi.org/10.1016/j.cpr.2010.12.003

Duncan, T. E., Tildesley, E., Duncan, S. C., & Hops, H. (1995). The consistency of family and peer influences on the development of substance use in adolescence. *Addiction, 90*, 1647-1660. doi:10.1046/j.1360-0443.1995.901216477.x

Evans, E., Huang, D., & Hser, Y. (2011). High-risk offenders participating in court-supervised substance abuse treatment: Characteristics, treatment received, and factors associated with recidivism. *Journal of Behavioral Health Services & Research*, *38*(4), 510-25. doi:10.1007/s11414-011-9241-3

Fain, T., Turner, S., & Ridgeway, G. (2012). *Los Angeles county juvenile justice crime prevention act*. Retrieved from http://www.rand.org/content/dam/rand/pubs/technical_reports/2012/RAND_TR1239.pdf

Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23,000 prisoners: A systematic review of 62 surveys. *Lancet*, *359*, 545-550. doi:10.1016/S0140-6736(02)07740-1.

Fazel, S., & Rongqin, Y. (2011). Psychotic disorders and repeated offending: Systematic

review and meta-analysis. *Schizophrenia Bullentin*, *37*, 800-810. doi:10.1093.schbul/sbp135

Fazel, S., & Yu, R. (2011). Psychotic disorders and repeat offending: Systematic review and meta-analysis. *Schizophrenia Bulletin*, *37*, 800–810. doi: 10. 1093/schbul/sbp135PMID:19959703

Fearon, R., & Belsky, J. (2011). Infant–mother attachment and the growth of externalizing problems across the primary school years. *Journal of Child Psychology and Psychiatry*; *52*,782–791. doi:10.111/j.1469-7610.2010.02350.x

Fearon, R., Bakermans-Kranenburg, M., van Ijzendoorn, M., Lapsley, A. & Roisman, G. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: a meta-analytic study. Child Development, 81(2):435-56. doi: 10.1111/j.1467-8624.2009.01405.x.

Pasco Fearon, R.M. and Belsky, J. (2011), Infant–mother attachment and the growth of externalizing problems across the primary-school years. Journal of Child Psychology and Psychiatry, 52: 782–791. doi:10.1111/j.1469-7610.2010.02350.x

Federal Bureau of Investigations (FBI). (2012). *Crime in the United States*. Retrieved from http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/resource-pages/download-printable-files

Fedcock, G., Fries, L., & Kubiak, S. (2013). Service needs for incarcerated adults: Exploring gender differences. *Journal of Offender Rehabilitation*, 52(7), 493-508. doi:10.1080/10509674.2012.759171

Felitti, V., & Anda, R. (2010). The relationship of adverse childhood experiences to adult

medical disease, psychiatric disorders and sexual behavior: Implications for healthcare. In R. Lanius, E. Vermetten, & C. Pain (Eds.), *The impact of early life trauma on health and disease: The hidden epidemic* (pp. 77-87). New York, NY: Cambridge University Press.

Fisher, W. H., Hartwell, S. W., Deng, X., Pinals, D. A., Fulwiler, C., & Roy-Bujnowski, K. (2014). Recidivism Among Released State Prison Inmates Who Received Mental Health Treatment While Incarcerated. *Crime & Delinquency*, *60*(6), 811-832. doi:10.1177/0011128714541204

Fisher, W.H., Roy-Bujnowski, K., Grudzinskas, A.J., Banks, S. M., Crockett, E., & Wolff, N. (2011). Comparing risk of arrest among public mental health services recipients and the general public. *Psychiatric Services*, 62, 67-72.

Fite, P., Wynn, P., & Pardini, D. (2009*)* Explaining discrepancies in arrest rates between Black and White male juveniles. *Journal Consult Clinical Psychology*, *77(*5*),916--927.* http://dx.doi.org/10.1037/a0016626

Freado, M., & Bath, H. (2014). *Standing alone in judgement*. Retrieved from www.reclaimingjournal.com

Freud, S. (1915). *The unconscious*. Standard Edition, Volume 14.

Frick, P., & White, S. (2008). Research review: The importance of callous-unemotional traits for developmental models of aggressive and antisocial behavior. *Journal of Child Psychology Psychiatry*, *49*(4),359-375. doi:10.1111/j.1469-7610.2007.01862.x

Friedman, L. (1994). *Crime and punishment in American history*. Basic Books.

Gonzalez, J., & Connell, N. (2014). Mental health of prisoners: Identifying barriers to mental health treatment and medication continuity. *American Journal of Public Health*, *104*(12), 2328-2333. doi:10.2105/ajph.2014.302043

Grisso, T. (2008). *Adolescent offenders with mental disorders*. The Future of Children, *18*(2). doi:10.1353/foc.0.0016

Gühne, U., Weinmann, S., Arnold, K., Becker, T., & Riedel-Heller, S. G. (2015). S3 guideline on psychosocial therapies in severe mental illness: evidence and recommendations. *European archives of psychiatry and clinical neuroscience*, *265*(3), 173-188.

Hammond, S. (2007). *Mental health needs of juvenile offenders*. Retrieved from http://www.ncsl.org

Hargreaves, C., & Francis, B. (2014). The long term recidivism risk of young sexual offender in England and Wales: Enduring risk or redemption? *Journal of Criminal Justice*. *42*(2),164-72. https://doi.org/10.1016/j.jcrimjus.2013.06.017

Harris County Juvenile Probation Department. (2014). *Mental health services.* Retrieved from www.hcjpd.org

HCJPD. (2016). 2015 Annual report. Retrieved from www.hcjpd.org

Harvey, C., Jeffreys, S. McNaught, A., Blizard, R. & King, M. (2007). "The camden schizophrenia surveys III: five-year outcome of a sample of individuals from a prevalence survey and the importance of social relationships". International Journal of Social Psychiatry. *53*(4),340-56. https://doi.org/10.1177/0020764006074529

Heath, O., Church, E., & Curran, V. (2014). Interprofessional health training in rural primary care, findings from a mixed effects study. *Journal of Interprofessional Care.* http://dx.doi.org/10.3109/13561820.2014.966808

Hemphala, M., & Hodgins, S. (2014). Do psychopathic traits assessed in mid-adolescence predict mental health, psychosocial, and antisocial, including criminal outcomes, over the subsequent 5 years? *Canadian Journal of Psychiatry*, *59*(1). https://doi.org/10.1177/070674371405900108

Herz, D., Ryan, J. & Bilchik, S. (2010). Challenges facing crossover youth: An examination of juvenile-justice decision making and recidivism. *Family Court Review*, *48*(2), 305-21. doi:10.1111/j.1744-1617.2010.01312.x

Hiday, V.A., & Wales, H. W. (2009) Criminalization of mental illness. In E. Vingilig & S. State (Eds.), *Applied research and evaluation n community mental health services: An overview*. Montreal: McGill-Queens.

Hill, J., & Sharp, H. (2015). Recurrent, serious problems of aggression and oppositionality are often referred to collectively as the conduct disorders (Hill, 2002). They are commonly first evident in early childhood, and carry a substantially increased risk of later crimi-finality and psychiatric disorders, spanning depression, anxiety disorders, substance misuse, and personality disorders (Odgers et al., 2008). Our understanding of their. *Handbook of Psychodynamic Approaches to Psychopathology*, 406.

HM Government. (2009). *Working together to safeguard children*. Retrieved from https://www.education.gov.uk/consultations/downloadableDocs/Working%20Tog

ether%20to%20Safeguard%20ChildrenV2.pdf

Hollin, C. R. (2002). Does punishment motivate offenders to change. *Motivating offenders to change: A guide to enhancing engagement in therapy*, 235-249.

Horton, A. (2011). Herion users: The need for improved treatment for incarcerated women. *Social Work in Public Health, 26*(2), 176-188. doi:10.1080/19371910903182773

Hsieh, F.Y., Block, D.A., and Larsen, M.D. (1998). A simple method of sample size calculation for linear and logistic regression. *Statistics in Medicine, 17*, 1623-1634. Retrieved from http://personal.health.usf.edu/ywu/logistic.pdf

Indiana Department of Correction (IDOC). (2010). *Juvenile recidivism*. Retrieved from http://www.in.gov/idoc/files/2010JuvRecidivismRpt.pdf

Justice Center. (2014). *Measuring and Using Juvenile Recidivism Data to Inform Policy, Practice, and Resource Allocation*. Retrieved from http://csgjusticecenter.org

Juvenile Law Center. (2015). *Mental health treatment and self-incrimination*. Retrieved from http://www.jlc.org/current-initiatives/fairness-and-due-process/mental-health-treatment-and-self-incrimination.

Kakade, M., Duarte, C. S., Xinhua, L., Fuller, C. J., Drucker, E., Hoven, C. W., & ... Ping, W. (2012). Adolescent Substance Use and Other Illegal Behaviors and Racial Disparities in Criminal Justice System Involvement: Findings From a US National Survey. *American Journal Of Public Health, 102*(7), 1307-1310 4p. doi:10.2105/AJPH.2012.300699

Kakar, S. (2006). Understanding the causes of disproportionate minority contact: Results

of focus group discussions. *Journal of Criminal Justice, 34,* 369-381. https://doi.org/10.1016/j.jcrimjus.2006.05.003

Kempf-Leonard, K. (2007) Minority youths and juvenile justice: disproportionate minority contact after nearly 20 years of reform efforts. *Youth Violence Juvenile Justice*, *5*(1),71--87. https://doi.org/10.1177/1541204006295159

Kerker, B. & Dore, M. (2006). Mental Health Needs and Treatment of Foster Youth: Barriers and Opportunities. *American Journal of Orthopsychiatry, 76*(1), 138–147. http://dx.doi.org/10.1037/0002-9432.76.1.138

Kinard, J., & Johnson, J. (2014). *Criminogenic risk assessments: What are they and what do they mean for your client.* Retrieved May 1, 2017 from http://www.voiceforthedefenseonline.com/story/criminogenic-risk-assessments-what-are-they-and-what-do-they-mean-your-client

Knoll, C., & Sickmund, M. (2010). *Delinquency cases in juvenile court, 2007*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, US department of Justice.

Kopak, A. M., Hoffmann, N. G., & Proctor, S. L. (2016). Key risk factors for relapse and rearrest among substance use treatment patients involved in the criminal justice system. *American Journal of Criminal Justice*: AJCJ, *41*(1), 14-30. http://dx.doi.org/10.1007/s12103-015-9330-6

LeBlanc, M. & Fitzgerald, S. (2000). Research design and methodology section: Logistic regression for school psychologists. *School Psychology Quarterly, 15*(3), 344-358. http://dx.doi.org/10.1037/h0088791

Langan, P.A., & Levin, D. J. (2002). Recidivism of prisoners released in 1994. *Bureau of Justice Statistics Special Report*. Retrieved from http://bjs.ojp.usdoj.gov/content/pub/pdf.rpr94.pdf.

Langrehr, K. (2011). Racial distinctions in the psychosocial histories of incarcerated youth. *Psychological Services, 8*(1), 23-25. doi: 10.10/a0021795

Linz, S., & Sturm, B. (2013). The phenomenon of social isolation in the severely mentally ill. *Perspectives in Psychiatric Care*, *49,* 243-352. doi: 10.111/ppc.12010

Listwan, S.J., Sullivan, C.J., Agnew, R., Cullen, F. T., & Colvin, M. (2013). The pains of imprisonment revisited: The impact of strain on inmate recidivism. Justice Quarterly, *30*(1), 168. doi:10.1080/07418825.2011.597772.

Liu, J. (2011). Early health risk factors for violence: Conceptualization, review of the evidence and implications. *Aggressive Violent Behavior*, *16*(1): 63-73. doi:10.1016/j.avb.2010.12.003

Mallett, C., Fukushima, M., Stoddard-Dare, P. & Quinn, L. (2012). Significant race differences in factors related to the detention recidivism of youthful offenders. *Journal of Ethnicity in Criminal Justice, 10*(1): 24-40. http://dx.doi.org/10.1080/15377938.2012.642727

Marshall, M., Lewis, S., Lockwood, A., Drake, R., Jones, P. & Croudace, T. (2005). Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. *Archivals General Psychiatry, 62*(9),975–983. doi:10.1001/archpsyc.62.9.975

McReynolds, L. S., Schwalbe, C. S., & Wasserman, G. A. (2010). The contribution of psychiatric disorder to juvenile recidivism. *Criminal Justice And Behavior, 37*(2), 204-216. doi:10.1177/0093854809354961

Moffitt, T., Caspi, A., Harrington, H. & Milne, B. (2002). Males on the life-course-persistent and adolescents-limited antisocial pathways: Follow-up at age 26 years. *Development and Psychopathology*. *14*,179-207

Moffitt, T., Lnam, D. & Silva, P. (2006). Neuropsychological tests predicting persistent male delinquency. *Criminology*, *32*(2): 277-300.

Morgan, R., Flora, D., Kroner, D., Mills, J., Varghese, F., & Steffan, J. (2013). Treating offenders with mental illness: a research synthesis. *Law Human Behavior*, *36*(1): 37-50. doi:10.1037/h0093964

Morgan, V. A., Morgan, F., Valuri, G., Ferrante, A., Castle, D., & Jablensky, A. (2013). A whole-of-population study of the prevalence and patterns of criminal offending in people with schizophrenia and other mental illness. *Psychological Medicine, 43*(9), 1869-80. http://dx.doi.org/10.1017/S0033291712002887

Mulder, E., Brand, E., Bullens, R., & van Marle, H. (2011). Risk factors for overall recidivism and severity of recidivism in serious juvenile offenders. *International Journal Of Offender Therapy And Comparative Criminology*, *55*(1), 118-135. doi:10.1177/0306624X09356683

National Council on Crime & Delinquency (2016). *Juvenile Justice*. Retrieved from http://www.nccdglobal.org/blog/adelante-embracing-the-new-normal

National Institute of Justice. (2014). *Recidivism*. Retrieved from

http://www.nij.gov/topics/corrections/recidivism/Pages/welcome.aspx

National Institute of Mental Health. (2013). *Offenders with mental illness*. Retrieved from https://www.nimh.nih.gov

Peterson, I. (1995). *Cutting down on amenities to achieve no-frills jails*. Retrieved from http://www.nytimes.com/1995/07/10/nyregion/cutting-down-on-amenities-to-achieve-no-frills-jails.html

Oshri, A., Rogosch, F., Burnette, M., & Cicchetti, D. (2011). Developmental pathways to adolescent cannabis abuse and dependence: Child maltreatment, emerging personality, and internalizing versus externalizing psychopathology. *Psychology of Addictive Behaviors*, *25*(4), 634-644. http://dx.doi.org/10.1037/a0023151

Owen, N. & Cooper, C. (2013). *The start of a criminal career: Does the type of debut offense predict future offending?* Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/261222/horr77.pdf

Perkins, D., Gu, H., Boteva, K. & Lieberman J. (2005). Relationship between duration of untreated psychosis and outcome in first-episode schizophrenia: a critical review and meta-analysis. *American Journal Psychiatry*, *162*(10),1785–1804. https://doi.org/10.1176/appi.ajp.162.10.1785

Peterson, J., Skeem, J., & Manchak, S. (2011). If you want to know, consider asking: How likely is it that patients will hurt themselves in the future? *Psychological Assessment, 23,* 626– 634. doi: 10.1037/a0022971

Petrosino, A., Guckenburg, S., & Turpin-Petrosino, C. (2010). *Formal system processing*

of juveniles: Effects on delinquency. Retrieved from http://www.campbellcollaboration.org/library.php.

Prins, S. J., Skeem, J. L., Mauro, C., & Link, B. G. (2015). Criminogenic Factors, Psychotic Symptoms, and Incident Arrests Among People With Serious Mental Illnesses Under Intensive Outpatient Treatment. *Law and Human Behavior, 39*(2), 177–188. http://doi.org/10.1037/lhb0000104

Puzzanchera, C. (2013). *Juvenile Arrests*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention. Retrieved from www.ojjdp.gov/pubs/244476.pdf

Rabkin, J. G. (1979). Criminal behavior of discharged mental patients: A critical appraisal of the research. *Psychological Bulletin, 86*(1), 1-27. doi:10.1037/0033-2909.86.1.1

Raina, P. & Lunsky, Y. (2009). "A comparison study of adults with intellectual disability and psychiatric disorder with and without violent involvement". Research in Developmental Disabilities, *31*(1), 218-23. https://doi.org/10.1016/j.ridd.2009.09.008

Rawal, P., Romansky, J., Jenuwine, M., & Lyons, J. (2004). Racial differences in the mental health needs and service utilization of youth in the juvenile justice system. *Journal of Behavioral Health Services & Research*, *31*(3), 242-254.

Reavis, J., Looman, J., Franco, K., & Rojas, B. (2013). Adverse childhood experiences and adult criminality: How long must we live before we posess our own lives? *Permanente Journal*, *17*(2), 44-48. doi:10.7812/TPP/12-072

Roberts, C. (2015). *Juvenile delinquency: Cause and effect*. Retrieved from

http://www.yale.edu/ynhti/curriculum/units/2000/2/00.02.05.x.html

Sarteschi, C. M. (2013). *Mentally ill offenders involved with the US criminal justice system.* Sage open, 3(3). doi: 10.1177/2158244013497029

Sawyer, A.M., Borduin, C.M. (2011). Effects of multisystemic therapy through midlife: A 21.9-year follow-up to a randomized clinical trial with serious and violent juvenile offenders. Journal of Consulting and Clinical Psychology, *79*, 643-652. http://dx.doi.org/10.1037/a0024862

Sedlak, A.J., & Bruce, C. (2010). *Youth's characteristics and backgrounds*. Washington, DC. Office of Justice Programs.

Shelden, R. (1999). *Detention diversion advocacy: An evaluation*. Retrieved from http://www.ncjrs.gov/pdffiles1/ojjdp/171155.pdf

Singh, J., Grann, M. and Fazel, S. (2011). "A comparison study of violence risk assessments tools: A systematic review and metaregression analysis of 68 studies involving 25,980 participants". Clinical Psychology Review. *31*(3), 499-513. https://doi.org/10.1016/j.cpr.2010.11.009

Skeem, J.L., Manchak, S, & Peterson, J. K. (2011). Correctional policy for offenders with mental illness: Creating a new paradigm for recidivism reduction. *Law and Human Behavior*, *35*, 110-126.

Skeem, J. L., Winter, E., Kennealy, P. J., Louden, J., & Tatar, J. (2014). Offenders with mental illness have criminogenic needs, too: Toward recidivism reduction. *Law And Human Behavior, 38*(3), 212-224. doi:10.1037/lhb0000054

Smith, D., & Saldana, L. (2013). Trauma, delinquency, and substance use: Co-occurring

problems for adolescent girls in the juvenile justice system. *Journal of Child & Adolescent Substance Abuse, 22*,450-465. http://dx.doi.org/10.1080/1067828X.2013.788895

Snyder, H.N., & Sickmund, M. (2006). *Juvenile offenders and victims: 2006 National report*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Stacer, M. (2012). The interaction of race/ethnicity and mental health problems on visitation in state correctional facilities. *Journal of Ethnicity in Criminal Justice, 10*(1), 1-23. doi:10.1080/15377938.2011.609395

Stevens, J. P. (2015). *Applied multivariate statistics for the social sciences* (6th ed.). Mahwah, NJ: Routledge Academic.

Stoddard-Dare, P., Mallett, C., & Boitel, C. (2011). Association between mental health disorders and juveniles' detention for a personal crime. *Child and Adolescent Mental Health*. *16*(4). doi:10.1111/j.1475-3588.2011.00599.x

Substance Abuse and Mental Health Services Administration. (2016). *Criminal and juvenile justice*. Retrieved from http://www.samhsa.gov/criminal-juvenile-justice

Sullivan, C., & Latessa, E. (2011). The coproduction of outcomes: An integrated assessment of youth and program effects on recidivism. *Youth Violence and Juvenile Justice, 9*(3), 191-206. doi: 10.1177/1541204010393754

Tabachnick, B. G. & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.

Teplin, L., Abram, K., McClelland, G., Dulcan, M., & Mericle, A. (2002). Psychiatric

disorders in youth in juvenile detention. *Archives of General Psychiatry, 59*, 1133-1143. doi:10.1001/archpsyc.59.12.1133

Texas Criminal Justice Coalition. (2011). *Cost-saving strategies for texas' criminal and juvenile justice systems.* Retrieved from http://www.texascjc.org/sites/default/files/uploads/Cost-Saving%20Strategies%20-%20Part%204%20(Feb%202011).pdf

The University of Texas Health. (2015). *Harris County Psychiatric Center*. Retrieved from https://hcpc.uth.edu/pages/services/imp-child-serv.htm

Thompson, M. (2010). Race, gender, and the social construction of mental illness in the criminal justice system. *Sociological Perspectives, 53*(1), 99-126. http://dx.doi.org/10.1525/sop.2010.53.1.99

Thompson, R. & Raikes, H. (2003). Toward the next quarter-century: Conceptual and methodological challenges for attachment theory. *Development and Psychopathology*, *15*(4), 691-718. https://doi.org/10.1017/S0954579403000348

Treatment Advocacy Center. (2014). *The treatment of persons with mental illness in prisons and jails: A state survey*. Retrieved from http://tacreports.org/storage/documents/treatment-behind-bars/treatment-behind-bars.pdf

Tripodi, S. J., Bledsoe, S. E., Kim, J. S., & Bender, K. (2011). Effects of correctional-based programs for female inmates: A systematic review. *Research on Social Work Practice, 21*(1), 15-31. doi: 10.1177/1049731509352337

Trotter, C., & Evans, P. (2012). An analysis of supervision skills in youth probation.

Australian & New Zealand Journal of Criminology, *45*(2), 255-273. doi:10.1177/0004865812443678

Umamaheswar, J. (2013). Bringing hope and change. *International journal of offender therapy and comparative criminology*, *57*(9), 1158-1182. doi: 10.1177/0306624X12445986

U.S. Department of Veterans Affairs. (2014). *PTSD: National center for PTSD*. Retrieved from http://www.ptsd.va.gov/public/PTSD-overview/basics/index.asp

Van der Put, C., Asscher, J., Stams, G., van der Laan, R., Jongman, E., & Doreleijers, T. (2012). Recidivism after treatment in a forensic youth –psychiatric setting: The effect of treatment characteristics. *International Journal of Offender Therapy and Comparative Criminology, 57*(9), 1120-1139. doi: 10.1177/0306624X12452389

Vigesaa, L. (2013). Abuse as a form of strain among Native American and White female prisoners: Predictors of substance-related offenses and recidivism. *Journal of Ethnicity in Criminal Justice*, *11*(1/2), 1-21. doi:10.1080/15377938.2013.739384

Vondra, J., Shaw, D., Swearingen, L., Cohen, M. & Owens, E. (2001). Attachment stability and emotional and behavioral regulation from infancy to preschool age. *Developmental Psychology, 13*(1):13-33.

Walji, I., Egan, V., Fonseca, A., & Huxley, A. (2014). The relationship between violence, level of functioning, and treatment outcome in psychiatric inpatients. *Journal of Forensic Practice*, *16*(4), 295. Retrieved from http://ezp.waldenulibrary.org/login?url=https://search.proquest.com/docview/1633966083?accountid=14872

Wang, X., Hay, C., Todak, N., &Bales, W. (2014). Criminal propensity, social context, and recidivism: A multilevel analysis of interactive relationships. *Criminal Justice & Behavior*, *41*(3), 300-317. https://doi.org/10.1177/0093854813507055

Wartna, BSJ., Tollenaar, N., Blom, M., Alma, M., Bregman, IM. & Essers AAM. (2011). *Recidiveberichten 2002-2008*. The Hague: WODC.

Wehrman, M. (2011). Examining race and sex inequality in recidivism. *Sociology Compass*, *5*(3), 179-189. doi:10.1111/j.1751-9020.00362.x

Yampolskaya, S. and Chuang, E. (2012), Effects of Mental Health Disorders on the Risk of Juvenile Justice System Involvement and Recidivism Among Children Placed in Out-of-Home Care. American Journal of Orthopsychiatry, *82*,585–593. doi:10.1111/j.1939-0025.2012.01184.x

Yampolskaya, S., Mowery, D., & Dollard, N. (2014). Profile of children placed in residential psychiatric program: Association with delinquency, involuntary mental health commitment, and reentry into care. *American Journal Of Orthopsychiatry*, *84*(3), 234-243. doi:10.1037/h0099808