THE IMPACT OF JUVENILE DRUG COURT ON RECIDIVISM

by

Mallory N. Watkins

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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2023

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ABSTRACT

The number of youths entering the juvenile justice system is a viable concern throughout the United States. A gap in the existing literature surrounding juvenile justice is recidivism rates among young offenders who are incarcerated or sanctioned to a community-based level of supervision after committing a transgression of a law. Federal juvenile justice practitioners, such as the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the National Council of Juvenile and Family Court Judges (NCJFCJ), the United States Department of Justice (DOJ), and others, in addition to individual states and localities throughout the United States, have taken various approaches to address juvenile delinquency. One notable strategy is the therapeutic jurisprudence approach or theory that focuses on intervention by the judiciary to kingpin the rehabilitation of offenders through providing specific resources to meet offender needs; thus, promoting successful reintegration into society once released from incarceration or completing a rehabilitation program. This study aimed to investigate juvenile recidivism among juvenile drug court graduates from 2015, 2016, 2017, and 2018. Juvenile recidivism data were analyzed through the Chi-square test of Independence, multiple linear regression, and an ANOVA to ascertain the impact of the therapeutic jurisprudence approach, highlighting the efficacy of juvenile drug court in a state located in the Southeastern region of the United States.

Keywords: therapeutic jurisprudence, juvenile drug court, recidivism, rehabilitation

Copyright Page

Dedication

To my dad, Timothy Wayne Woods, in loving memory.

Acknowledgments

I would like to take a moment to acknowledge those that have supported me throughout my academic journey. First and foremost, I would like to thank God who has granted countless blessings to me, providing me with the patience, strength, courage, knowledge, and ambition to complete this degree. Apart from the extensive efforts of myself, the success of this dissertation depends significantly on my Committee members, Dr. Christopher Sharp and Dr. Dale Wilson, therefore, thank you for your encouragement and support.

I would like to express my deepest appreciation to my husband Dajon, my brother Brandon, and my daughter Mya for their undoubted support and patience throughout my collegiate studies. I would like to express gratitude to my mentor and colleague, Dr. Walter Stroupe for his constant support throughout my educational and career endeavors. Many thanks to Nicholas Leftwich and The Honorable Judge Joanna Tabit as without their support, I would not have been able to complete this degree. This endeavor would not have been possible without the parties listed above.

"My mission in life is not merely to survive, but to thrive; and to do so with some passion, some compassion, some humor, and some style" – Maya Angelou

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List of Abbreviations

Adverse Childhood Experiences (ACES)

Council of State Governments Justice Center (CSG)

Driving Under the Influence (DUI)

Educational Resource Information Center (ERIC)

Institutional Review Board (IRB)

International Society for Therapeutic Jurisprudence (ISTJ)

J.D.B. v. North Carolina (2011)

Journal Storage (JSTOR)

Juvenile Drug Court (JDC)

Juvenile Justice Reform Act (JJRA)

Massachusetts Youth Screening Instrument – Second Version (MAYSI-2)

Medically Assisted Treatment (MAT)

National Council of Juvenile and Family Court Judges (NCJFCJ)

National Drug Court Institute (NDCI)

Office of Juvenile Justice and Delinquency Prevention (OJJDP)

Problem Oriented Screening Instrument for Teenagers (POSIT)

Reclaiming Futures (RF)

Risk Reduction Therapy (RRTA)

Statistical Package for the Social Sciences (SPSS)

Substance Use Disorder (SUD)

Treatment as Usual (TAU)

United States (U.S.)

Chapter One: INTRODUCTION

Overview

In 2018, drug-related offenses committed by juveniles made up 51 percent of adjudicated cases (United States Department of Justice, 2020a). The Substance Abuse and Mental Health Services Organization (2020a) suggested that according to the National Survey on Drug Use and Health, 17.2 percent of all adolescents aged 12 to 17 used illicit drugs in the past year, and 4.5 percent of youth were diagnosed with a substance use disorder (SUD). The authors noted that youth experiencing substance use disorders and are left untreated, are at an increased risk of engaging in undesirable behaviors, such as criminal involvement during adolescence and continuing the behavior as they reach adulthood. This chapter provides a background of the problem investigated in this study. The chapter includes the problem statement, the purpose statement, and the significance of the study. Additionally, this chapter introduces the research questions and provides essential definitions of key terms used throughout the study.

Background

The judiciary implemented adult drug court diversion programs to combat an overwhelming amount of cases involving illegal substances (Cunningham & Ledgerwood, 2019; Substance Abuse and Mental Health Services Administration, 2020b). Following the implementation of adult drug courts, court jurisdictions began to recognize the importance of treatment for juvenile offenders and shadowed the adult drug court model to provide the juvenile drug court treatment approach in the mid-1990s (United States Department of Justice, 2003; Substance Abuse and Mental Health Services Administration, 2020b). Although juvenile adjudication rates have decreased over the last century, approximately 423,077 delinquency cases are adjudicated and disposed of each year (Youth Involved with the Juvenile Justice

System, n.d.). The West Virginia Judiciary (2021) reported that several thousand youths within the juvenile justice system are currently under court-ordered supervision. Examples of court-ordered supervision include participation in juvenile drug courts, community corrections programs, supervision by a probation officer, or a separate configuration of diversion programming. The juvenile drug court program in the Southeastern state studied targets youth involved in the juvenile justice system who have alcohol and other drug dependency problems to provide alternative sanctions to traditional detention.

Historical Overview

The juvenile justice system has undergone a series of reforms since establishing the first juvenile court authorized by the Juvenile Court Act of 1899 (National Institute of Medicine, 2001). The National Institute of Medicine suggested that before the 19th century, children as young as seven years old could be tried and convicted in criminal court. If a child was convicted, they could also be sentenced to prison or given the death penalty, as noted by the authors. Consequently, the authors noted that the Juvenile Court Act gave the court jurisdiction over delinquent and neglected children, which promoted mandatory education, vocational education, and reformed child labor laws that aimed to enhance child development. They suggested the development of the juvenile court diverted youth from the criminal court and enhanced its jurisdiction and social control over juvenile offenders. Cunningham and Ledgerwood (2019) affirmed juvenile drug courts are specialized court dockets within the juvenile justice system involving youth offenders experiencing substance abuse concerns in need of intervention. They argued that youth who enter the juvenile justice system have unique and individualized needs that vary between offenders and require adequate treatment strategies to reduce future substance use and crime.

The development of the juvenile justice system resulted in particular courts and incarceration facilities as part of the Progressive Era reform efforts (National Institute of Medicine, 2001; Washington et al., 2021). The National Institute of Medicine suggested stakeholders involved in the reform process believed that sentencing youth offenders as adults was incredibly harsh and resulted in future recidivism. The authors reported that the primary goal of the development of the juvenile justice system was to prevent juvenile offenders from being treated as criminals, as children are developmentally different from adults and are not as culpable of their actions as their adult counterparts. As the development of juvenile courts continued to flourish, juvenile drug courts were established to keep juvenile offenders within their communities to receive adequate treatment to address alcohol and substance abuse concerns through deferred prosecution tactics, suspended sentences, and the potential of getting an offenders charges dismissed upon completion of the drug court program (Lurigio, 2008).

Hiller et al. (2021) suggested juvenile drug treatment courts have had difficulty defining a format that addresses the needs of offenders since they began in the mid-1990s. The authors noted that due to this strain, the 16 Strategies of Juvenile Drug Courts were established by a committee of juvenile justice practitioners and researchers to focus on the needs of youth and their families. The Strategies include 16 specific guidelines established by the National Drug Court Institute (NDCI) and the National Council of Juvenile and Family Court Judges (NCJFCJ) that provide a framework for the flawless operation of the juvenile drug court program (Idrogo et al., 2021). Since their inception, juvenile drug courts have expanded to address the unique needs of offenders. Currently, approximately 400 juvenile courts are operating throughout the United States aimed to identify the individualized needs of offenders and eliminate substance use and crime (Substance Abuse and Mental Health Services Administration, 2020b; Cunningham &

Ledgerwood, 2019). Today, improving strategies to reduce recidivism remains a significant goal within the juvenile justice system, as evidence has revealed that the juvenile justice system may also contribute to the issue of recidivism amongst youth (Point Park University, 2021).

Social Context

Sheidow et al. (2012) suggested rates of adolescent substance abuse and dependency are notably high. The authors noted that although some youth substance use is considered developmentally normal, a significant number of concerns result from youth substance use, including criminal behavior, increased automobile accidents, sexual behavior creating a greater likelihood of contracting sexually transmitted diseases, poor education status, unemployment, and suicidal ideation or attempts. The authors noted that the various adverse outcomes derived from youth substance use can result in consequential personal, social, and economic costs. Additionally, they suggested discovering effective means of intervention to address youth substance abuse is a top priority of court jurisdictions resulting in increased attention supporting evidence-based practices that use cognitive-behavioral and behavioral strategies. The authors reported that juvenile drug courts have expanded nationally and have yet to have consistent evaluations regarding their effectiveness as opposed to their adult drug court counterparts, where evidence has revealed favorable outcomes clinically and economically.

Cunningham and Ledgerwood (2019) suggested mental health treatment is an essential component of the drug court program to address any traumatic events, learning disabilities, or other co-occurring concerns displayed by the participants. McCollister et al. (2018) argued there is a discrepancy between the effectiveness of juvenile drug courts and their economic impact. The authors evaluated program costs and economic benefits between five Juvenile Drug Court and Reclaiming Futures (JDC/RF) programs. The authors revealed that money available to

jurisdictions varies as many drug court jurisdictions have one juvenile drug court and others have two or three different treatment tracks requiring different levels of intervention. Additionally, they discovered that the average cost to participate in community-based juvenile drug court programming is approximately $38,288 per youth based on an average length of time of 40.9 weeks. Third, they discovered that JDC/RF programs produce more significant cost savings than standard programs such as inpatient detention. Marlowe (2021) suggested that although juvenile drug court programs have grant money available and are positively cost-beneficial for taxpayers, it is essential to consider that not all jurisdictions have the same level of resources and treatment interventions available in the community to fit the needs of youth participants.

This study aimed to address the effectiveness of juvenile drug court programs on recidivism rates in a state in the southeastern United States. Researchers have found that establishing juvenile and adult drug courts have proven cost-effective and have a positive economic impact compared to traditional detention and incarceration (McCollister et al., 2018; Wormer, 2011). However, one common weakness is the lack of adherence to the 16 Strategies of Juvenile Drug Courts established by the United States Department of Justice to guide policies and practices of the juvenile drug court program. This study examined the juvenile drug courts in the Southeastern region to investigate if juvenile drug courts effectively reduce recidivism with the current policies and evidence-based practices available. The study aimed to address the literature gap regarding the variability in treatment services provided in the different jurisdictions and how this may play a role in the fluctuation of recidivism amongst juvenile drug court participants.

Theoretical Context

This study explored recidivism data among 2015, 2016, 2017, and 2018 juvenile drug court graduates. The selected years provided the most recent statewide data of juvenile drug court participants when followed three years following completion of the program. It is important to note that in late 2017, and early 2018, the JDC program was reconstructed. Meaningful reforms increased administrative oversight resulting in mandated evidence-based practices to ensure adherence to the 16 Principles. Wexler and Winick (2015) suggested the expansion of therapeutic jurisprudence has resulted in a psychologically optimal alternative to handling legal matters through therapeutic intervention.

Holtfreter and Kaiser (2016) suggested specialized courts, such as drug treatment courts, have expanded to other issues, including mental health, domestic violence, veterans, and reentry. The authors argued therapeutic jurisprudence offers foundational principles; however, it is limited in explaining how evidence-based strategies work to change offender behavior. They presented an integrated model that combined therapeutic jurisprudence and procedural justice concepts to bridge the gap in understanding the effectiveness of specialized court systems such as drug treatment courts. The authors reported therapeutic jurisprudence in specialized courts makes explicit connections to procedural justice, and their model suggests that through applying therapeutic jurisprudence and procedural justice concepts, specialized courts can effectively measure consistency, impartiality, quality of decisions, correctability, and ethicality within the court system.

Ferrazzi and Krupa (2015) studied whether therapeutic jurisprudence is a functional methodological theory implemented within mental health care and criminal law. The authors suggested therapeutic jurisprudence can be considered a legal theory that utilizes psychological resources that can impact an individual's well-being. Additionally, therapeutic jurisprudence can

be viewed as a philosophical foundation for courts focusing on diversion and problem-solving to address the inherent causes of criminal behavior, as noted by the authors. This study highlighted the treatment resources available in the various jurisdictions throughout the rural Appalachian, Southeastern region to ensure equity of availability of treatment throughout the state. This study aimed to improve professional practice by providing critical information regarding adherence to the 16 Strategies of Juvenile Drug Court and evaluating the resources available to confirm youth offenders are receiving the most appropriate treatment to meet their individualized needs to reduce or eliminate recidivism. The study enhanced the knowledge regarding the current effectiveness of juvenile drug court programs in the jurisdiction studied regarding recidivism rates amongst justice-involved youth following completion of the juvenile drug court program.

Problem Statement

The Office of Juvenile Justice and Delinquency Prevention (2020a) reported in 2018, juvenile jurisdiction courts handled 744,500 delinquency cases across the United States. The authors noted that approximately two thousand juvenile cases are handled per day. Additionally, the report indicated that 31 million youth between the ages of 10 and 17 were under juvenile court jurisdiction in 2018. The proportion of cases involving juveniles involves more significant proportions of person and drug offense cases, as noted by the authors. A significant concern is that crimes involving controlled-substance violations comprise youth offenders' third-largest category of offenses (West Virginia Judiciary, 2021). This study investigated whether participation in juvenile drug courts was influential in decreasing youth recidivism by examining the effectiveness of the treatment available during programming. The study analyzed recidivism data from the graduating drug court participants of 2015, 2016, 2017, and 2018 and followed

them three years post-graduation to discover if participation in the juvenile drug court program was influential in reducing recidivism as youth reach adulthood.

In 2018, youth between the ages of 12 and 17 met the criteria for a substance use disorder, equaling approximately 1.08 million (Belisle & Thompson, 2020). The current literature on the topic is deficient as there are inconsistent results on juvenile drug court effectiveness and if participation leads to decreasing recidivism and substance abuse; therefore, there is not enough research available to bring the issue of drug court effectiveness to closure. Long and Sullivan (2017) suggested there is variability between the types of drug court programming available and the program's overall effectiveness resulting in obscured results. To this writer's knowledge, there was no existing literature on recidivism in the Appalachian state studied that aimed to discover if juvenile drug court participation leads to decreasing recidivism. The problem this quantitative study explored was recidivism rates amongst youth offenders and if juvenile drug court participation reduces future criminality. The study sought to fill the literature gap within juvenile drug court effectiveness by investigating statewide data in a Southeastern state regarding recidivism and substance abuse among adolescent drug court participants. The study aimed to discover if the courts' bearing on therapeutic jurisprudence is noteworthy in reducing recidivism rates among juvenile offenders.

Purpose Statement

The purpose of this quantitative study was to explore how participation in juvenile drug courts may reduce recidivism rates amongst youth offenders based on the courts' position of therapeutic jurisprudence and evidence-based therapeutic interventions in a state located in the Southeastern region of the United States. The research objective was to review pre-existing data on youth recidivism before implementing evidence-based practices. Secondly, the study analyzed

recidivism data after implementing evidence-based practices to highlight if the interventions successfully reduced recidivism. The theory that guided this research was Wexler and Winick's (2015) therapeutic jurisprudence theory, defined as "the extent to which substantive rules, legal procedures, and the roles of lawyers and judges produce therapeutic or antitherapeutic consequences" (Perlin, 2017, p. 3). For this study, therapeutic jurisprudence is the courts' ability to act as a therapeutic agent based on offender behavior to advance psychological well-being (Perlin, 2020; Yamada, 2021a). Therapeutic jurisprudence clarifies the court's role in assisting in the rehabilitation of offenders and has transitioned the judiciary from its original duties of solely sanctioning individuals that commit a crime to being an essential influence during an offender's rehabilitation and substance use recovery process.

Significance of the Study

This study sought to contribute to the existing literature surrounding the effectiveness of juvenile drug courts. The study aimed to provide awareness of the evidence-based practices practiced within the jurisdiction to discover if participation in juvenile drug courts is influential in reducing recidivism by exploring recidivism rates three years post-graduation. Additionally, the study investigated how juvenile drug courts adhere to the 16 Principles of Juvenile Drug Courts to ensure programming is correctly implemented by practitioners and participants and if youth are receiving the proper treatment to meet their individualized needs. Recent studies have explored the effectiveness of juvenile drug courts and recidivism (Belisle & Thompson, 2020; Belenko et al., 2022; Long & Sullivan, 2017). However, the studies did not focus on the jurisdiction involved in the study or follow graduates three years post-graduation. Additionally, other studies have not reviewed recidivism rates of juvenile drug court participants by different jurisdictions emphasizing the availability of resources. For example, Long and Sullivan's study

studied aspects of the juvenile drug court program from nine juvenile drug courts throughout the United States, measured the ratio of incentives and sanctions, and discovered that participants who experienced more incentives had a reduced likelihood of recidivism.

A second example is Belisle and Thompson's (2020) study that examined juvenile drug court participation and its impact on adult recidivism. The authors conducted a 12- year follow-up study where adult recidivism rates were analyzed between adults that previously participated in juvenile drug court and adults that participated in traditional probation. They revealed that gender and race could potentially have an impact on how justice-involved youth experience the drug court program, as results revealed girls are less likely to be terminated from the drug court program than boys, and boys were four times more likely to receive a new referral while participating in juvenile drug court. The authors noted that the study highlighted the need for gender and culturally responsive intervention strategies and programs implemented within the juvenile drug court curriculum. They suggested future research on the topic to include considering personal and environmental factors such as co-occurring mental health concerns, employment, and housing stability that may impact juvenile drug court program effectiveness. Additionally, the authors supported future research regarding the day-to-day functions of juvenile drug courts regarding model adherence and level of access to evidence-based treatment.

This study was theoretically significant as it aimed to thicken the literature on Wexler and Winick's (2015) therapeutic jurisprudence theory and the court's ability to act therapeutically to assist in rehabilitating juvenile offenders. This study's practical significance involved improving, extending, and expanding uniform evidence-based treatment practices to ensure youth receive proper treatment to meet their individualized needs. Juvenile justice practitioners will have a heightened understanding of the need for evidence-based practices to measure the effectiveness

of the juvenile drug court program regarding future criminality among youth participants. This information will assist with enhancing programs and community resources throughout the Southeastern state studied. Additionally, this study aimed to identify any concerns with juvenile drug court model adherence that may contribute to recidivism. Finally, suppose discrepancies in model adherence exist; In that case, programs can be updated to better implement the curriculum necessary to assist in the rehabilitation process, therefore, benefiting youth participants and protecting the community from further victimization.

Research Question(s)

RQ1: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion?*

RQ2: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion?*

RQ3: *Is there a difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018?*

Definitions

1. **Clearly Defined Target Population and Eligibility Criteria**- "Define a target population and eligibility criteria that are aligned with the program's goals and objectives" (United States Department of Justice, 2003, p. 10).
2. **Collaborative Planning** – "Engage all stakeholders in creating an interdisciplinary, coordinated, and systemic approach to working with youth and their families" (United States Department of Justice, 2003, p. 10).

3. **Community Partnerships**- "Build partnerships with community organizations to expand the range of opportunities available to youth and their families" (United States Department of Justice, 2003, p. 10).
4. **Comprehensive Treatment Planning**- "Tailor interventions to the complex and varied needs of youth and their families" (United States Department of Justice, 2003, p. 10).
5. **Confidentiality**- "Establish a confidentiality policy and procedures that guard the privacy of the youth while allowing the drug court team to access key information" (United States Department of Justice, 2003, p. 10).
6. **Cultural Competence**- "Create policies and procedures that are responsive to cultural differences and train personnel to be culturally competent" (United States Department of Justice, 2003, p. 10).
7. **Developmentally Appropriate Services**- "Tailor treatment to the developmental needs of adolescents" (United States Department of Justice, 2003, p. 10).
8. **Drug Testing**- "Design drug testing to be frequent, random, and observed. Document testing policies and procedures in writing" (United States Department of Justice, 2003, p. 10).
9. **Educational Linkages- "**Coordinate with the school system to ensure that each participant enrolls in and attends an educational program that is appropriate to his or her needs" (United States Department of Justice, 2003, p. 10).
10. **Family Engagement**- "Recognize and engage the family as a valued partner in all components of the program" (United States Department of Justice, 2003, p. 10).

11. **Focus on Strengths**- “Maintain a focus on the strengths of youth and their families during program planning and in every interaction between the court and those it serves” (United States Department of Justice, 2003, p. 10).
12. **Gender-Appropriate Services**- “Design treatment to address the unique needs of each gender” (United States Department of Justice, 2003, p. 10).
13. **Goal-Oriented Incentives and Sanctions**- **“**Respond to compliance and noncompliance with incentives and sanctions that are designed to reinforce or modify the behavior of youth and their families” (United States Department of Justice, 2003, p. 10).
14. **Judicial Involvement and Supervision**- **“**Schedule frequent judicial reviews and be sensitive to the effect that court proceedings can have on youth and their families” (United States Department of Justice, 2003, p. 10).
15. **Monitoring and Evaluation**- “Establish a system for program monitoring and evaluation to maintain quality of service, assess program impact, and contribute to knowledge in the field” (United States Department of Justice, 2003, p. 10).
16. **Teamwork** – “Develop and maintain an interdisciplinary, non-adversarial work team” (United States Department of Justice, 2003, p. 10).
17. **Therapeutic Jurisprudence** – “The extent to which substantive rules, legal procedures, and the roles of lawyers and judges produce therapeutic or antitherapeutic consequences” (Perlin, 2017, p. 3).

CHAPTER TWO: LITERATURE REVIEW

Overview

Untreated substance abuse and mental health concerns pose a substantial threat to public health across the United States due to the prevalence and severity of the disorders within society (Kidd et al., 2018; Chan et al., 2022; Jemberie et al., 2020). Literature measuring youth substance use report that in 2018, youth between the ages of 12 and 17 met the criteria for a substance use disorder, equaling approximately 1.08 million youth, and nine in 10 of these youth did not receive treatment (Belisle and Thompson, 2020; Substance Abuse and Mental Health Services Administration, 2022c). Common substances abused include alcohol, tobacco, marijuana, cocaine, heroin, hallucinogens, and inhalants (Substance Abuse and Mental Health Services Administration, 2019; Centers for Disease Control and Prevention, 2020; Hoyte & Wang, 2018). In recent years, there has been an increase in the misuse of opioids, prescription pain relievers, sedatives, stimulants, and benzodiazepines (Substance Abuse and Mental Health Services Administration; Smid et al., 2021). The Substance Abuse and Mental Health Services Administration reported the ubiquity of co-occurring issues, such as the combination of substance abuse and mental health concerns, including perceived risk from substance abuse, any mental illness, severe mental illness, and major depressive episodes.

Examples of mental health concerns include suicidal thoughts, plans, and non-fatal attempts (Substance Abuse and Mental Health Services Administration, n.d.; 2021). Dauber et al. (2018) affirmed the inherent need for proper diagnostic assessment tools to identify mental disorders within addiction treatment to improve treatment interventions further. This chapter highlights the gaps in the literature regarding juvenile drug courts and effective interventions used in the rehabilitation process. This chapter begins with a narration of the theoretical

framework used to pilot this study. Therapeutic jurisprudence (TJ) theory, established by David Wexler and Bruce Winick was used to establish the foundation of which the study was composed. Related literature was reviewed to highlight the various topics relevant to mandated juvenile drug court treatment and the evidence-based practices applied during participation in the juvenile drug court program. Additionally, the existing literature accentuates the relationship between involvement in juvenile drug courts and reducing recidivism rates among juvenile offenders. A comprehensive literature search was conducted through Liberty University's Jerry Falwell Library.

The keywords used to perform the search included: juvenile drug courts, drug court programs, therapeutic jurisprudence theory, evidence-based practices, juvenile justice system reform, co-occurring disorders, youth and mental health disorders, youth rehabilitation programs, community-based treatment for juvenile offenders, diversion programs for juvenile offenders, recidivism rates, youth and delinquency, substance use disorders, risk factors associated with juvenile substance abuse, and recidivism rates from adolescence to adulthood. The extensive search led to various peer-reviewed, scholarly articles in databases, including EBSCOhost, SCOPUS, SAGE Journals, HeinOnline, ProQuest, JSTOR, and ERIC. Additionally, continued searches for literature were conducted through databases such as Google Scholar, state and federal annual reports, and local government studies.

Theoretical Framework

The theoretical framework strengthens a study by providing a foundation of theoretical assumptions that permit the reader to critically evaluate the information within the study (Guilford College, 2021; Sacred Heart University, 2022; The University of Southern California, 2022). The University of Southern California reported that a theoretical framework binds

existing literature and the researcher to provide a basis for the research hypothesis and methods. Further, the authors suggested the theoretical framework articulates the theoretical assumptions in such a way that addresses questions of why and how and the overall phenomenon are adequately delineated. Moreover, they suggested the theoretical framework assists the researcher in identifying relevant variables that may influence the phenomenon of interest. The theoretical framework consists of concepts and definitions that are relevant to scholarly literature pertaining to the particular study and must properly illustrate a relationship that is relatable to a broader range of knowledge (The University of Southern California, 2022; Kivunja, 2018). The theoretical framework that established the foundation for the study was the therapeutic jurisprudence theory developed by Wexler (2014) and Winick (1997).

History of the Therapeutic Jurisprudence Theory

Therapeutic jurisprudence originated in mental health law and today applies internationally in every area of law (Babb, 2021; Siddiqui, 2018; Wexler, 2018). Therapeutic jurisprudence aims to address legal rules, legal procedures, and the role of legal actors in the therapeutic realm (Huskey, 2017; Stannard, 2021; Lynch & Perlin, 2017). Therapeutic jurisprudence was developed by David Wexler and the late Bruce Winick in 1987 (Perlin, 2017; Winick, 2003; Wexler, 2014). Perlin noted that Wexler was a lawyer within the United States Justice Department and transitioned to working as a law professor at age 26. Additionally, he noted that Wexler dedicated his writings to criminal law, criminal procedure, and topics regarding mental health procedures in law. Further into Wexler's career, the author reported Wexler identified his overall interest was law and therapy and proceeded to present at a conference held by the National Institute of Mental Health, where he extended his perspective on using the law as therapy, bringing the idea of therapeutic jurisprudence to fruition. As a result,

the author noted three years after the conference, Wexler published the book *Therapeutic Jurisprudence: The Law as a Therapeutic Agent.*

Wexler's primary focus of the book was to highlight that mental health law would best benefit and serve society if consistent efforts were initiated to treat the role of law as therapeutic (Perlin, 2017). Wexler's work resumed with Bruce Winick when they published *Essays in Therapeutic Jurisprudence* (Perlin, 2019). Perlin highlighted that the publication included the individual pieces of Wexler and Winick and the literature they wrote jointly. The author reported that Wexler and Winick define therapeutic jurisprudence as "the extent to which substantive rules, legal procedures, and the roles of lawyers and judges produce therapeutic or antitherapeutic consequences" (p. 3). Therapeutic jurisprudence challenges legal roles and procedures to enhance their therapeutic potential without violating proper due process (Perlin, 2020). Perlin (2019) suggested that the foundation for therapeutic jurisprudence was solidified in 1991. He indicated that Wexler and Winick continued to add extended context to the literature, and they presented at the New York Law School for the first academic conference on therapeutic jurisprudence in the spring of 1993.

Perlin (2017) noted that the first barrier to address was whether current legal rules restrained the overwhelming potential of implementing therapeutic jurisprudence and ensuring that proper due process would not be impacted. The author suggested the New York Law School conference amplified therapeutic jurisprudence resulting in Wexler and Winick publishing their book, *Law in a Therapeutic Key: Developments in Therapeutic Jurisprudence,* in 1996. Additionally, he noted Wexler and Winick combined a variety of therapeutic jurisprudence-based articles that included sexual orientation law, contracts, commercial law, labor arbitration law, and physical disability law. Furthermore, he declared therapeutic jurisprudence became

generalizable to mental health law and broader issues within the justice system. The first International Conference on Therapeutic Jurisprudence was held in 1998, as noted by the author. Perlin reported that the conference orchestrator, David Carson was a law faculty member of the Behavioral Science and Law Network at the University of Southampton.

Perlin (2017) suggested that this conference was the turning point of therapeutic jurisprudence as, afterward, scholars began to investigate and adopt therapeutic jurisprudence in their personal writings and practices. Simultaneously, he noted scholars began to host their own conferences with a central focus on therapeutic jurisprudence. The author highlighted that in the most recent years, therapeutic jurisprudence has been emphasized and published in 14 languages. There are additional writings regarding therapeutic jurisprudence in Spain, Portugal, Latin America, and the Caribbean, as noted by Perlin. Therapeutic jurisprudence initially began with law professors and has expanded to the professions of forensic psychology, criminology, social work, and sociology (Perlin, 2017; Bartels, 2019). Further, Perlin suggested that there are over 2,000 journal articles regarding therapeutic jurisprudence; however, only 28 cases have utilized the term. The author reported that one exception is an article where the Florida Supreme Court inquired about the principles of therapeutic jurisprudence within the juvenile justice system and found that a dependent child's perception of if they are being heard and if their opinion is respected is paramount to the behavior of the child and the child's psychological growth and development.

Review of Adult Drug Courts

The state of Florida was the first to initiate the drug court movement in the United States in 1989 by establishing the first adult drug court in Miami-Dade County (Florida Courts, 2022; Roman et al., 2020; Gallagher et al., 2019). The Florida Courts reported that since their

inception, drug courts have confirmed that participation in drug courts drastically reduced crime and provided better treatment outcomes for drug-related offenders. Additionally, the authors noted that drug courts are cost-beneficial and offer various strategies to address substance abuse and crime. They noted that in 1993, the Florida Legislature provided treatment intervention programs as an alternative sentence for nonviolent felony offenders. Further, the authors suggested that the treatment interventions developed in the 1990s solidified a framework for drug courts operating today. Following the expansion of drug courts in Florida in 2001, the Legislature aimed to implement drug court programs throughout the United States to reduce crime and recidivism, as noted by the authors.

The United States Department of Health and Human Services (2018) reported that drug courts are specialized court docket programs that assist in rehabilitating criminal defendants, juvenile offenders, and parents with pending child welfare cases through intensive substance use treatment strategies. The Florida Courts (2022) suggested that addressing family dysfunction through court intervention could eventually lead to hindering the cycle of drug addiction, thus, reducing crime. The authors noted that as of July 2021, Florida has 93 drug courts operating throughout the state. They reported that there are currently 55 adult drug courts, 19 juvenile drug courts, 13 dependency drug courts, four DUI drug courts, one Marchman Act drug court, and one domestic violence drug court. Gallagher et al. (2019) suggested that due to the high success rates in adult drug courts in treating substance use disorders and reducing recidivism, drug courts have expanded throughout the United States, and there are currently drug courts operating in Australia, Canada, and Scotland.

The United States Department of Health and Human Services (2018) reported that drug courts are utilized as an alternative sanction to traditional incarceration and provide offenders the

opportunity to receive treatment. Many adult drug courts utilize medically assisted treatment (MAT) for opioid dependence, as noted by the authors. The authors suggested the courts constantly review effective medications to ensure the proper use of MAT for opioid dependence. Kearley et al. (2019) suggested that medically assisted treatment should be implemented in drug court programs nationwide in conjunction with naloxone training. The authors conducted a study that aimed to test the effects of adult drug court participation and the long-term risk of mortality among participants. The author's discovered heroin was the most notable substance of choice by the population studied. Further, the authors observed mortality rates for 15 years following participation in the drug court program and traditional incarceration and noted that 20 percent of participants died during the study at an average of 46.6 years of age, and 64.4 percent of deaths in the sample were substance-use related. Premature death amongst the population studied represents a high-risk population of offenders in need of substance use treatment, as noted by the authors.

Kearley et al. (2019) argued that MAT treatment for opioid dependence within the drug court program is the most effective intervention to treat opioid use disorders. They suggested drug treatment courts (DTCs) should implement best practice standards for not only substance abuse; however, also for overdose prevention. The authors suggested that increased access to MAT and naloxone training would greatly benefit offenders and reduce fatal outcomes. Drug courts are designed to offer treatment as alternatives to incarceration; therefore, it is crucial to address the needs of all individuals struggling with substance use concerns through traditional treatment or MAT (Kearley et al. 2019; Bentzley & Morris, 2020). Bentzley and Morris suggested that as the courts have become significant access points for treatment, participants should be offered the best treatment available to meet their individualized needs. The Substance

Abuse and Mental Health Services Administration (2022a) reported that medically assisted treatment is used to treat substance use disorders and prevent the risk of overdose.

The Substance Abuse and Mental Health Services Administration (2022a) suggested that medically assisted treatment uses medication, counseling, and behavioral therapies to target the entirety of an individual's needs to treat substance use disorders. Medications approved by the Food and Drug Administration for MAT include acamprosate, disulfiram, and naltrexone to treat alcohol use disorders and buprenorphine, methadone, and naltrexone to treat opioid disorders for addiction to drugs such as heroin, morphine, codeine, oxycodone, and hydrocodone (Substance Abuse and Mental Health Services Administration, 2022a; U.S. Food and Drug Administration, 2019; New York State Office of Addiction Services and Supports, n.d.). The Substance Abuse and Mental Health Services Administration reported that in 2018, approximately two million people in the United States were diagnosed with an opioid disorder, including individuals addicted to prescription pain medications that contain opiates and heroin. The authors suggested that medically assisted treatment aims to improve the survival rates of participants, increase retention of treatment, vastly reduce, or eliminate opiate use leading to criminal behavior amongst participants, improve an offender's daily life, such as the ability to gain and sustain employment, and to improve birth outcomes of women diagnosed with opioid use disorders that are actively abusing drugs during throughout pregnancy.

Counseling Strategies for Adult Drug Court

The Substance Abuse and Mental Health Services Administration (2022b) suggested that mental health and substance abuse disorders impact individuals differently. They reported that substance use, and mental health disorders are widespread, dangerous, and recurrent; however, they can be treated. The authors noted that mental health disorders, including substance use

addiction, result in changes in thinking, mood, and behavior. It is important to note that when an individual is experiencing a mental health or substance use disorder, it can vastly impact decision-making and reduce an individual's ability to function, as noted by the authors. The authors suggested severe mental health disorders in adults include individuals over the age of 18 that have been diagnosed with a mental, behavioral, or emotional disorder that causes impairment in function, such as limiting an individual's ability to function in daily life tasks. Additionally, they reported that for youth under 18, severe mental illnesses are referred to as serious emotional disturbances that exist in individuals diagnosed with matching disorders to their adult counterparts, impacting the youth's functioning within their family, school, or community.

The Substance Abuse and Mental Health Services Administration (2022b) suggested that substance use disorders occur when individuals use alcohol and drugs frequently and recurring that result in impairment, including problems with their health, disability, and failure to meet daily responsibilities such as at work, school, in the community, or at home. The coexistence of mental health and substance use disorders are referred to as co-occurring disorders, as noted by the authors. Korchmaros (2018) suggested that there is a distressing need for effective evidence-based substance use treatment programs to address substance use and co-occurring disorders. The Substance Abuse and Mental Health Administration (2019) reported that approximately 164.8 million people aged 12 and older in the United States were past-month substance users, including tobacco, alcohol, or illegal drugs. Specifically, the authors revealed 139.8 million people drank alcohol, 58.8 million people used tobacco products, and 31.9 million people abused illicit drugs.

Korchmaros (2018) studied the effectiveness of specific programs utilized to address substance use and co-occurring disorders for drug court clients. The Seven Challenges therapeutic curriculum is a comprehensive substance use counseling program utilized within various drug court programs around the United States that aims to target decision-making, as opposed to strict abstinence from drugs, by using interactive journaling, skills training, and motivational interviewing (Korchmaros, 2018; Winters et al., 2018). Korchmaros conducted a study to evaluate the effectiveness of The Seven Challenges in comparison to standard cognitive-behavioral substance use treatments. The author noted that the curriculum is a comprehensive and client-centered counseling program used to address substance use, mental health problems, the existence of the combination of both substance use and mental health concerns, and criminality. Evidence revealed that based on data from 71 adult drug court participants, The Seven Challenges curriculum was more highly accepted, and participants reported higher levels of satisfaction, as noted by the author. Additionally, the author suggested the curriculum was equally as effective as standard cognitive-behavioral treatment, more effective at reducing substance use and mental distress, and more effective at reducing future criminal activity than their traditional cognitive-behavioral treatment counterparts.

Jones and Pope (2020) suggested that the American criminal justice system imprisons more than 2.3 million people in state, federal, local, Indian country jails, and civil commitment centers within the United States. They suggested that out of the 2.3 million people incarcerated each year, approximately 636,000 of those incarcerated re-enter society after serving a specific time in penal institutions. The authors noted that 95% of incarcerated offenders will be released at some point and will return home with notable gaps in education and employment longevity. They suggested that an additional concern is the number of young adults that find themselves in

the justice system. The authors suggested that drug court programs appear to reduce recidivism from 8 to 26 percent compared to other diversion programs or traditional probation. Furthermore, they noted that drug courts integrate treatment and court sanctions simultaneously, which has proven to be successful through consistent judicial intervention, extensive monitoring, and immediate response to undesirable behaviors. Drug court participants are provided intensive therapeutic treatment, including frequent court appearances, scheduled and random drug testing, and incentives awarded, or sanctions given for undesirable behavior (The White House, n.d.; Tabashneck, 2018; Schreiber, 2021).

The White House (n.d.) suggested drug courts operate to divert non-violent offenders experiencing substance use dependence issues into supervised programs aimed to keep participants in their communities while receiving treatment advocating for abstinence from substance use. The authors noted that the court's mission is for judicial officers, law enforcement, and treatment resources within the community to collaborate to provide the best support and treatment interventions possible for the successful rehabilitation of participants. Furthermore, they confirmed that drug courts aim to assist participants in overcoming addiction and reduce the likelihood of recidivism following program completion. They suggested that the drug court movement continues to expand throughout the United States, and there are currently more than 2,500 drug court programs presently operating throughout the nation. The authors noted that a review of five independent meta-analyses concluded that drug court programs reduce recidivism by an average of eight to 26 percent, and tenured drug court programs have statistically reduced recidivism by 35 percent when compared to traditional probation supervision. They validated that the three main goals of drug court treatment include reduced recidivism, reduced substance use among participants, and overall rehabilitation.

Juvenile Drug Courts

Juvenile drug courts are court-ordered diversion programs developed from the adult drug court model to assist in reducing alcohol and substance use among youth offenders (Cunningham & Ledgerwood, 2019; Marlowe, 2021). Cunningham and Ledgerwood suggested that, like adult drug courts, juvenile drug courts were designed to provide effective interventions to youth, their families, and other natural supports such as community members involved in their lives to divert undesirable behaviors, reduce alcohol or substance use, and limit future recidivism. Evidence has revealed youth offenders continue to maintain their substance use and criminal activity as they reach adulthood in the absence of effective interventions, as noted by Cunningham and Ledgerwood. The authors affirmed that juvenile drug courts are specialized court dockets within the juvenile justice system involving youth offenders experiencing substance abuse concerns in significant need of intervention. They argued that youth who enter the juvenile justice system have unique and individualized needs that vary between offenders and require adequate treatment strategies to reduce future substance use and crime.

Evidence has revealed that participation in juvenile drug courts may be less stigmatizing than traditional sentencing and disposition, decreasing recidivism among youth offenders (Bouchard & Wong, 2017; Hartsell & Novak, 2022). Baglivio et al. (2018) suggested youth offenders must be provided with effective interventions to meet their needs, as exposing youth to inappropriate interventions may increase the likelihood of recidivism. Idrogo et al. (2021) suggested juvenile drug courts operate under the assumption of therapeutic jurisprudence. The authors revealed addressing the individualized needs of drug court participants is essential to the youth's overall rehabilitation. Furthermore, they disclosed that without proper treatment strategies within the drug court program specific to each participant's needs, youth cannot be

expected to make positive changes in their lives. Additionally, they suggested in addition to substance use treatment, a significant role of the court and practitioners involved in the drug court process is to provide resources to participants and their families, such as mental health treatment. Idrogo et al. substantiated that since drug courts operate as a product of therapeutic jurisprudence, criminal justice practitioners are granted the ability to highlight the psychological challenges youth face that impact substance use and criminal behavior.

In 2003, the National Drug Court Institute (NCDI) and the National Council of Juvenile and Family Court Judges (NCJFJC) introduced the 16 Strategies of Juvenile Drug Treatment Court that provide a framework for practitioners working with youth offenders that experience substance use disorders (Idrogo et al., 2021; Superior Court of California, 2021; Substance Abuse and Mental Health Services Administration, 2020b). Idrogo et al. argued courts established the 16 Strategies to address substance use and criminogenic needs to decrease recidivism amongst youth offenders and increase positive outcomes through influencing positive change. The authors suggested the 16 Principles are referred to as the Juvenile Drug Treatment Court Guidelines, designed to distinguish juvenile drug practices from their adult drug court counterparts. The United States Department of Justice (2003) list the 16 Principles of Juvenile Drug Court:

> Collaborative planning, teamwork, clearly defined target population and eligibility criteria, judicial involvement and supervision, monitoring and evaluation, community partnerships, comprehensive treatment planning, developmentally appropriate services, gender-appropriate services, cultural competence, focus on strengths, family engagement, educational linkages, drug testing, goal-oriented incentives and sanctions, and confidentiality. (p.10)

Fundamental Theoretical Principles of Therapeutic Jurisprudence

Henshaw et al. (2019) suggested recidivism rates highlight the specific failures of the criminal justice system and how the system responds to criminal behavior. The concept of therapeutic jurisprudence seeks to recognize how practices within the criminal justice system operate as a therapeutic agent by practicing empathy (Henshaw et al., 2019; Jones & Kawalek, 2019; Jones & Westaby, 2018). De Aquino Guimaraes and Traguetto (2019) suggested therapeutic jurisprudence is a vital concept in the reformed legal systems in many countries worldwide. The authors suggested interventions that have been implemented under the therapeutic jurisprudence approach in the realm of mental health have assisted in the development of problem-solving court systems. In the United States, incarceration as the only solution to criminal behavior does not break the cycle of drug use and crime, and prisoner reentry and recidivism pose vast challenges to individuals and communities (de Aquino Guimaraes & Traguetto, 2019; Craw & ten Bensel, 2020).

Sered et al. (2021) suggested community-based alternative programs assist individuals in securing housing and permitting offenders to work and support their families from outside a penal setting while receiving necessary treatment to meet their needs. Therapeutic jurisprudence highlights the adversarial areas of traditional law and sentencing and aims to provide alternative sentencing strategies to address the well-being of offenders through therapeutic or antitherapeutic interventions (Arstein-Kerslake & Black, 2020; Yamada, 2021a; Marson et al., 2019). De Aquino Guimaraes and Traguetto (2019) suggested shifting focus on improving results for victims, defendants, and communities is critical to rehabilitation. The authors argued when judicial officers recognized that traditional incarceration and supervised probation and parole did not result in a significant decrease in criminality, the judiciary began to support the

movement of implementing problem-solving diversion courts, such as drug courts, as opposed to traditional incarceration. Furthermore, they suggested that drug courts introduce a community-based alternative to incarceration that utilize evidence-based practices and methods of social science to address drug use and criminal behavior.

Therapeutic jurisprudence is a legal theory that examines both the therapeutic and anti-therapeutic properties of law practices and legal institutions (Yamada, 2021a; Bartels & Hopkins, 2019; Petrucci, 2021). De Aquino Guimaraes and Traguetto (2019) argued the traditional role of judges in the United States criminal justice system is to hear evidence and provide an educated decision contingent on the facts presented; however, the therapeutic jurisprudence theory drastically reformed the traditional role of the judge requiring judicial officers to play a vital role in the rehabilitation of offenders, opposed to solely imposing punitive sanctions. Yamada argued that therapeutic jurisprudence favors outcomes that enhance an individual's well-being through evidence-based practices focused on improving mental health and decreasing substance use that has expanded to various professions. He suggested that since its inception, therapeutic jurisprudence has been applied in fields such as family law, education settings, forensic psychology, psychiatry, elder law, and military law.

Yamada (2021b) suggested therapeutic jurisprudence has grown in the community of law school facilities, judges, attorneys, and graduate students that have continued to build academic literature nationwide. As a result of the continued expansion of therapeutic jurisprudence, the International Society for Therapeutic Jurisprudence (ISTJ) was established, in which David Wexler serves as the current life president (Yamada, 2021b; Yamada, 2019). Yamada reported that the ISTJ is a nonprofit organization that educates the public on the significance of therapeutic jurisprudence efforts. The University of Arizona (2022) reported in conjunction with

his prior publications regarding therapeutic jurisprudence, Wexler is a consultant for therapeutic jurisprudence to the National Judicial Institute of Canada and Puerto Rico and administers lectures on therapeutic jurisprudence in Australia and New Zealand. Courts that operate based on therapeutic jurisprudence, such as drug treatment courts, include a multidisciplinary team of court staff and treatment specialists that collaborate to assist in the success of the participant (Frailing et al., 2020; Logsdon et al., 2021; Revier, 2021).

Stobbs (2020) suggested therapeutic jurisprudence is an approach to assessing the impact of the law itself on individuals who are working through the criminal justice system. The author argued that the law is described as a therapeutic agent aimed to enhance the emotional experiences and improve legal outcomes, thus, reducing recidivism among offenders. Supporters of therapeutic jurisprudence are hopeful for the term to become a mainstream approach to addressing criminal behavior by enhancing police interviewing, risk assessments, diversion programs, conditional release from custody, and appeals (Stobbs, 2020; Gal & Schill-Jerichower, 2017; Richards et al., 2017). Stobbs indicated therapeutic jurisprudence has become the central framework of community-based problem-solving courts aimed at integrating community resources to assist in the rehabilitation process. Frailing et al. (2020) suggested the techniques used within therapeutic jurisprudence and problem-solving courts permit judges to utilize practices to effectively communicate directly with defendants who frequently are unable to have a voice in a traditional courtroom.

The criminal justice practitioners involved in the rehabilitation process determine the best treatment interventions available to meet the needs of offenders participating in the drug court program (Kahn et al., 2021; Lloyd-Sieger et al., 2021; Sheeran et al., 2022). Frailing et al. (2020) suggested therapeutic jurisprudence manifests in drug courts by assigning autonomy and

responsibility to the offender to work towards various successes. Constructive arguments have evolved regarding the potential paternalism of problem-solving courts and therapeutic jurisprudence suggesting the concept influences offenders into surrendering their constitutional and due process rights by pleading guilty to initial charges (Stobbs, 2020; Csete, 2020; Csete & Wolfe, 2017). Csete and Wolfe suggested that although the therapeutic jurisprudence approach has been widely accepted, critics argue treating offenders as patients in need of treatment, as opposed to criminals, is just another negative label for prison-like detention in the name of substance abuse treatment. McCoy (2020) questioned the role of the judiciary and argued that the role of judges should be to adjudicate, not medicate. For this reason, it is imperative to document conflicts and controversies of the therapeutic jurisprudence approach.

Conflicts and Controversies

Stobbs (2017) suggested recent criticisms of the therapeutic jurisprudence approach by a considerable number of scholars and legal practitioners have argued whether therapeutic jurisprudence poses a significant threat to proper due process within the criminal justice system. The author noted that conflict exists for both defendants and victims of crime, and the rights of both individuals are not guaranteed. He reported a colossal concern is a potential risk posed to the reputation of therapeutic jurisprudence in the eyes of the public, the judiciary, and the legal profession. The author noted the argument of implementing a variety of problem-solving courts with various initiatives and programs increases the incompatibility of the core principles associated with therapeutic jurisprudence and causes inconsistency in treatment. Additionally, the author proposed that problem-solving courts are vulnerable to constant changes in law and justice policy due to changes in government. Furthermore, he argued criticism regarding therapeutic jurisprudence has highlighted the rights of defendants as courts have become so

fixated on treatment and therapy, defense lawyers working within problem-solving courts have abandoned their obligations to monitor the procedural rights of clients.

Stobbs (2017) suggested defendants that choose to participate in diversion courts and are expected to plead guilty early is a significant due process concern. Although drug courts were established to reduce the justice involvement of drug offenders, critics argue the implementation of drug courts have led to an increase in drug-related arrests as therapeutic jurisprudence continues to expand (Lilley, 2017; Lilley et al., 2020). Stobbs reported that most drug treatment courts in the United States are post-plea courts. He advised that for defendants to qualify for the drug court program, offenders are charged, assessed, determined to be dependent on drugs, and found guilty of the crime committed. He argued this becomes a conflict as the lawyer that represents the defendant prior to entering the drug court program will most often not be the same defense lawyer that will follow the defendant through the drug court program. Thus, the author noted that if the defendant does not complete the drug court program and is unsuccessfully discharged, it is common for the originating charge to stand without proper initial due process.

Stobbs (2017) emphasized that therapeutic jurisprudence is not responsible for fixing the justice system or rectifying all its issues. On the contrary, he suggested contrasted criticisms have focused on victims of crime and suggested therapeutic jurisprudence is a privilege and reducing recidivism by introducing treatment is unlikely. Stobbs argued one notable opinion piece on the therapeutic jurisprudence theory suggests courts have failed to protect innocent citizens from violent crime, and citizens have a right to expect resources funded by taxpayers to be spent on court programs that ensure public safety. He also noted critics suggest the implementation of therapeutic jurisprudence and problem-solving courts have stolen the social benefits of punishment by replacing well-established legal rules and discipline with treatment. Gately et al.

(2018) suggested it is paramount for policymakers to provide evidentiary support in favor of drug court programs as the public, which indirectly fund the programs through their taxes, has a right to be conscious of if the programs are successful. Additionally, the authors suggested that increased information-sharing between policymakers who implement community-based programs, and the public is vital as the public are the victims of crimes drug court participants commit.

Theoretical Gap

Wexler's (2014) and Winick's (1997) therapeutic jurisprudence theory is salient for understanding the framework of problem-solving courts, specifically drug courts. However, it is crucial to identify the gaps to continue to expand the benefits the term brings to the criminal justice system. Drug courts and other community-based problem-solving courts were developed throughout the United States to divert individuals with mental health concerns and substance use disorders away from the justice system (Barsky et al., 2021; Smelson et al., 2019; Belenko, 2019). Barsky et al. suggested a gap in the literature exists regarding implementing community-based treatment programs on a federal level. Peters et al. (2017) indicated that over seven million individuals in the United States are supervised by the criminal justice system. The authors suggested many of these individuals have been diagnosed with co-occurring mental and substance use disorders resulting in a high likelihood of recidivism. Specialized screening and assessment tools are utilized to identify offenders who meet the criteria to participate in drug court programming; however, the literature is deficient in providing specific information on the type of evidence-based interventions provided to participants during drug court treatment, as noted by Peters et al..

Although there is an abundance of studies supporting drug court programs, there is minimal evidence of the specific interventions that assist in the rehabilitation process and the relationship between co-occurring disorders and drug court outcomes (Zettler, 2019; Turner, 2022; Kim et al., 2019). Using performance measurement tools to measure the drug court program's outcomes throughout the year should be considered to rectify the gap in the literature regarding the actual effectiveness of the interventions used throughout the programming (Henry, 2018; Broscious et al., 2019; Cheesman et al., 2019). Kroll and Moynihan (2018) suggested performance management and program evaluation tools are both structures that can provide measurable insight into government effectiveness. Henry indicated that uniform clinical screenings are paramount to ensure that the screening process serves the population most in need of intervention. As a result, this study aimed to address the interventions involved in the juvenile drug court program to highlight if the interventions that have been implemented are constructive in reducing recidivism amongst juvenile offenders.

Connection to the Proposed Study

Based on the gap in the literature, the purpose of this study was to investigate the evidence-based treatment programs currently used within juvenile drug court programs in a state in the Southeastern region of the United States. Barsky et al. (2021) suggested therapeutic jurisprudence features the importance of the criminal justice system considering psychological health and should aim to avoid imposing anti-therapeutic consequences. They offered therapeutic jurisprudence provides a framework of reform responsible for providing rehabilitative services to individuals in need of mental health and substance use treatment. Studies regarding the effectiveness of drug courts highlight the factors that increase the likelihood of failures in the drug court program, such as incarceration used as a sanction, failure to receive proper

rehabilitative services, and discharge without any after-care follow-up (Gibbs et al., 2019). The White House (2022) suggested examples of external factors that lead to continued substance use by youth, including where the participant lives, peer relationships, developmental or learning delays, and receptiveness to the treatment juvenile drug courts offer, thus, resulting in program failure.

Long and Sullivan (2017) added to the existing literature with their study regarding the incentives and sanctions offered during drug court programming. They reported negative consequences can result when practitioners must administer sanctions for undesirable behavior. The authors argued if the interventions are excessively punitive, harmful interventions will impact the therapeutic jurisprudence approach, thus, negatively impacting proper rehabilitation, and potentially influencing the likelihood of recidivism. Additionally, they suggested that if the participant views the sanctions as unfair, defiance may develop, resulting in an increased chance of recidivism and termination from the program. Bolin (2022) suggested punitive sanctions have proven to be less effective, resulting in states rethinking their sentencing policies for youth offenders. In contrast to prior strategies used to approach recidivism, such as the what works to reduce recidivism initiative, evidence-based practices can produce definable outcomes by utilizing proper measurement tools aimed to measure program intervention effectiveness (United States Department of Justice, 2022; Link & Logan, 2019).

This writer's study was quantitative in nature. It aimed to discover if the evidence-based practices used for treatment during participation in juvenile drug courts effectively reduce recidivism rates among youth offenders. This study examined the counseling strategies, demographic and socioeconomic data, and numerical data on recidivism rates in the Southeastern region studied before the implementation of evidence-based practices, and after the program

underwent reconstruction to determine if the therapeutic jurisprudence approach accompanied with evidence-based practices were efficacious in reducing recidivism rates for youth offenders. Furthermore, the study aimed to bridge the gap in the literature regarding the interventions that have proven to be most beneficial to the rehabilitation of youth offenders, such as the implementation of the 16 Practices of Juvenile Drug Court. The study did not aim to determine the individual interventions and their effectiveness; however, it examined overall recidivism rates amongst juvenile drug court participants.

Related Literature

Drug court programs aim to hinder the revolving door of substance abuse and crime by providing alternative sanctioning strategies that differ from traditional incarceration (Shannon et al., 2018; Office of Juvenile Justice and Delinquency Prevention, n.d.; United States Department of Justice, 2020b). The first adult drug court established in 1989 aimed to address the increase in drug-related crime by offering therapeutic treatment for offenders experiencing substance-related concerns (Shannon et al. 2018; Kaplan et al., 2018; Holtfreter & Somers, 2018). Shannon et al. noted that drug courts are alternative sentencing strategies to keep citizens in society as opposed to placing them in penal institutions for drug-related offenses. The authors conducted a study that involved reviewing recidivism rates within 154 academic studies and discovered drug court participation reduced overall recidivism from 50% to 38% and drug-related recidivism from 50% to 37%. Recidivism can be measured by examining re-arrests, new incarcerations, and new convictions; however, recidivism is often measured by exploring re-arrests, as noted by the authors. Juvenile drug courts gained popularity a few years after adult drug courts were implemented, with the first juvenile drug court established in the 1990s, specifically in 1993 in Key West, Florida (Cunningham & Ledgerwood, 2019; Washburn, 2018).

Chronology of the United States Juvenile Justice System

Javdani (2019) reported that over one million youth under the age of 18 are arrested annually in the United States. The United States Department of Justice (2021a) reported that in 2019, the arrest rate for drug abuse violations amongst juvenile offenders was 244.2 arrests per 100,000 youth between the ages of 10 and 17. Javdani suggested juvenile court systems process approximately 3,000 delinquency cases each day. Additionally, he argued the cost of confining youth has reached approximately $250 per day for each youth. The author noted that despite the cost, many of the juvenile offenders in confinement have not been formally charged with a crime. Additionally, he reported an example of youth offenders that are not charged officially are referred to as status offenders. Furthermore, he argued many youths are at risk of entering the juvenile justice system, and there is little evidence to support the assumption that initial youth criminal activity can predict recidivism.

Javdani (2019) suggested methods for youth becoming involved in the juvenile justice system can include negative contact with the police, and referrals to community-based diversion services through the youth's school, community, or court system. Additionally, the author suggested other avenues for youth to get involved in the justice system occur after a petition has been filed against them, through traditional probation after the level of supervision has been established by a judge, through rehabilitation or detention facilities, and through aftercare services that are court-ordered following an offender being released from a higher level of supervision such as long-term residential facilities. Washington et al. (2021) suggested the five distinct periods in juvenile justice reform include the Puritan Era, Refuge Era, Juvenile Court Era or Progressive Era, Juvenile Rights Period, and the Crime Control Era. Throughout the core eras of juvenile justice reform, substantial legislation was enacted regarding protecting youth

offenders, including the Juvenile Justice Delinquency and Prevention Act of 1974, which was later reauthorized as the Juvenile Justice Reform Act of 2018 (Jones et al., 2020; Peck, 2018; Lane, 2018).

Washington et al. (2021) suggested the first juvenile court was established in 1899 with the assistance of social workers. They indicated youth offenders were deemed blameless for certain actions due to being in the early developmental stages of life compared to their adult counterparts. The authors reported that after discovering the unique needs of youth offenders, it was paramount to emerge a system of separate measures to rehabilitate youth who demonstrated undesirable behaviors such as defiance and delinquency. They verified the Puritan Era within the creation of the juvenile justice system began in 1646 and ended in 1824. Additionally, they suggested that at its inception, the Puritan Era enforced that children exhibiting delinquent behavior were forced into physical labor. The framework of this juvenile justice method was based on the philosophy of *patria potestas,* which provided a youth's father with complete authority over family matters, including punishment strategies for children, as noted by the authors.

Long (2020) argued *patria potestas* signifies the power one private person has over another. He suggested the Roman term mandated fathers had control over their children, grandchildren, and other descendants. Furthermore, the author reported under *patria potestas, the* emancipation of the child was the solitary strategy to dissolve that power. Washington et al. (2021) suggested that throughout the Puritan Era, many laws permitted children to receive the death penalty for not obeying their parents. They reported after the Stubborn Child Laws were passed between the 1640s and the mid-1800s, status offenses were established for youth offenders. Additionally, they suggested a significant reform under the Stubborn Child Laws was

children under the age of seven were unable to be convicted of a felony offense; however, once they turned eight years of age could be charged with a felony. Furthermore, the authors discovered although juvenile control was placed within the family, there was a high level of church involvement. They suggested if parental intervention did not result in a change in behavior, youth offenders would go through the adult justice system to face conviction which led to the Refuge Era in 1824.

Following the Puritan Era, the Refuge Era flourished that aimed to develop separate institutional settings for youth offenders as opposed to punitive warehouse types of institutions (Mallett, 2018). Washington et al. (2021) suggested juvenile offenders were placed in houses of refuge mandated by the court. They reported in addition to the houses of refuge, reform schools and foster homes were developed where youth could remain from early adolescence to adulthood. The authors suggested strategies used within the houses of refuge included loss of privileges or physical punishments such as whippings. Additionally, they reported reform schools were implemented to integrate a home-like setting that focused on formal schooling, while foster homes were developed to take the role of family surrogates. However, the authors attested there was a large discrepancy in how each institutional setting was managed, resulting in foster parents engaging in harmful behaviors against fostered youth, and a considerable number of foster parents were convicted of crimes due to abuse and neglect of the child. Consequently, this increased likelihood of undesirable behaviors amongst the youth due to continued physical and psychological abuse and re-traumatization, as noted by the authors.

Washington et al. (2021) suggested throughout the Refuge Era, the child-saving movement arose. They argued child-savers were a group of individuals that aimed to reform the philosophy that children were seen as inherently good and were highly against arresting and

trying youth offenders. The authors suggested the child-savers believed society should seek to discover why youth participate in undesirable behavior and establish less punitive alternatives to delinquent behavior. Additionally, the authors suggested the child-savers did not believe children should be held accountable to the same standard as adult offenders. They argued the child-savers group considered poverty a crime and that the problems youth experienced were a product of poverty, urbanization, and unhealthy living environments. Thus, the authors proposed local and state governments began to intervene to identify neglected and delinquent children by adopting new strategies to address the needs of youth. They reported the provincial government began implementing more correctional policies within the institutions that increased the separation of adult and youth offenders.

Arrigo and Sellers (2018) suggested the child-saving movement was led by politically conservative, middle-class women who worked as caretakers for delinquent youth. They argued the goal of the child-saving campaign was to implement white, middle-class moral values. Additionally, they suggested the political component of the child-saving movement resulted in media outlets supporting the desperate need of the government to control juvenile delinquency. Further, the authors argued media-based child-saving techniques resulted in misguided opinions of the need to control and regulate youth offenders that were at the time viewed as threats to society, resulting in increased security and surveillance in schools. Washington et al. (2021) suggested during the Refuge Era, black children were not considered eligible to be protected by the new parental state as slavery had just ended. They argued when the first refuge house opened in New York in 1825, black children were not eligible for acceptance until ten years later and were denied an opportunity for rehabilitation in the early juvenile justice system. Furthermore, they suggested that in 1899, juvenile justice transitioned to the Juvenile Court Period.

Troutman (2018) suggested the first juvenile court was established in Cook County, Illinois, in 1899 to rehabilitate juvenile offenders. Burton (2019) indicated after juvenile courts were established, they quickly expanded across most of the United States by 1925 and, twenty years later, were operating in all 50 states. However, the author argued juvenile courts have been subjected to a variety of criticism since their inception. Washington et al. (2021) reported during the Progressive Era, advocates for youth offenders aimed for governments to separate juvenile sanctioning from their adult counterparts. The authors noted the Juvenile Court Act of 1899 sought to regulate the treatment and control of children with delinquent tendencies, and this legislation laid the foundation for the nation's first juvenile court system. Additionally, the authors suggested during the Progressive Era, government officials mandated that youth offenders must be protected and molded into law-abiding citizens, and judges transitioned from the role of punitive authoritarian, to concerned caretaker. Furthermore, they indicated during the Progressive Era, the United States criminal justice system recognized they had a separate duty to children and should not be intertwined with adult offenders, especially in penal institutions.

Mcinnis et al. (2020) argued as a result, the court invoked the law doctrine of *parens patriae,* which granted the court the right for children to be considered wards of the state in need of correction and supervision. The authors noted this doctrine held that the state steps in civilly to address juvenile delinquency. Burton (2019) suggested there was more work to be done with the new juvenile court system as after some time, juvenile courts did not have the resources available to provide appropriate treatment for youth offenders. Thus, the author reported Catholic churches insisted that children be placed in religious environments, and alternatively, industrial school managers advocated for legislation that would grant industrial schools' control over institutional treatments and conditions as opposed to judicial entities. Further, the author reported

due to discrepancies in the managing strategies of the different juvenile court programs, the barrier of inconsistent court systems became apparent such as the legal status of juvenile courts and the procedures the courts followed.

Burton (2019) noted despite the early variety in juvenile court procedure, a relatively uniform component of juvenile justice was the development of probation. He suggested youth offenders that participated in a flexible program like probation allowed constructive judicial intervention as the involvement of probation officers, social workers, police officers, and community members was favorable to the juvenile justice system. The author noted probation officers could make random or scheduled home visits and make recommendations to the court on any necessary changes in parenting or environmental conditions of the youth. Additionally, he reported the probation officer was responsible for providing reports, managing court orders, and collecting pertinent information on the social workers directly involved with the youth. Washington et al. (2021) suggested following the juvenile court era, the Juvenile Rights Period flourished. The authors reported in the 1960s, the Supreme Court reformed its efforts to deem a child a ward of the state due to an increase in racial stigma, initiating the Juvenile Rights Period.

Washington et al. (2021) suggested since its inception, the juvenile court system transitioned from a family-focused system to a combative system where advocates for youth began to challenge that the juvenile court system was unconstitutional as it did not provide formal court proceedings for youth offenders. Additionally, the authors noted an extensive debate regarding the juvenile justice system involved the fact that youth offenders were initially not represented by an attorney. As a result, in 1967, the court case, *in re Gault* resulted in legislation that provided youth offenders the right to an attorney and required juveniles to have proper due process protection (Washington et al., 2021; Burruss et al., 2020; Wills, 2017). The

case *in re Gault* case was the first case to challenge the structure of the juvenile justice system and was the most compelling case in the Juvenile Rights Period (Pennington, 2018; Feld, 2017).

Pennington (2018) suggested *in re Gault* involved a fifteen-year-old boy, Gault, that was accused of making a phone call to a neighbor that involved the desire to commit sexual advances. The author reported the youth involved did not have a defense attorney present during the case, and the woman who received the explicit phone call did not testify in court. The trial judge sentenced Gault to up to six years in a detention institution otherwise referred to as an industrial school, as noted by Pennington. Following the Court's discovering of the long sentence authorized upon Gault, the author reported the Court mandated that juveniles are entitled to receive proper due process. The proper due process granted included timely notice of charges, the right to involve witnesses, the right against self-incrimination, the right to an appellate review, and the right to counsel, as illustrated in the due process clause within the Fourteenth Amendment of the United States Constitution (Pennington; Wurman, 2020; The United States Department of Justice, 2020c).

Washington et al. (2021) reported following the challenges, the juvenile legal system adopted a more punitive approach where youth offenders were housed in locked-down facilities. Further, they suggested locked facilities for delinquent youth resulted from contrasting opinions between social workers and policymakers regarding appropriate treatment for juvenile offenders. As a result, the authors reported the juvenile justice system began to mirror the adult criminal justice system, despite initial efforts to separate juvenile and adult court systems. Additionally, they claimed juvenile and adult justice systems increased in incarceration rates, and the war on drugs led to an increase in arrests for non-violent drug offenders. Further, the authors noted a significant transition in power occurred during the Juvenile Justice Period that withdrew absolute

power from the judges regarding introducing youth to supportive resources to the prosecutors that were responsible for persuading judges in juvenile court proceedings resulting in an increased number of youths in locked rehabilitative settings. Moreover, the authors alleged enacting more punitive punishments on juvenile offenders later was found to be ineffective, leading to political measures such as the tough-on-crime approach.

Washington et al. (2021) argued the tough-on-crime approach caused state governments to increase the utilization of institutional sanctions for less serious offenders. They asserted the media headlines played a substantial role in the increase of incarcerated youth regarding the rise in gang involvement, shootings, and drug abuse within the community. Due to the rise in institutionalization for drug offenses, the authors noted the original community-based resources that were implemented in the earlier juvenile justice system faded away as cocaine markets began to increase in the community. The authors indicated the escalation in illegal drugs resulted in the justice system abandoning community resources to address criminal behavior and began to use the funding to practice harsher punishments for offenders. They suggested shifting focus to incarcerating drug offenders resulted in youth offenders being placed in adult facilities and serving extended sentences for minor drug offenses. Further, they reported some states began to combat the increase in institutionalization and aimed to divert back to the community-based approaches that were once implemented, thus, leading to the Crime Control Period.

Garrett (2018) suggested between the early 1970s and 1980s, while community-based, evidence-based practices slowly filtered away, notable federal legislation was enacted to combat the decay in treatment strategies for youth offenders. The author noted the Omnibus Crime Control and Safe Streets Act of 1968 was amended to require the evaluation of grants utilized for rehabilitative programs. Additionally, the author contended the 1988 Anti-Drug Abuse Act

Byrne Grants program mandated that only programs that produced effectiveness would be funded. Furthermore, he noted despite the conditions of proven effectiveness and increased funding for criminal justice research, minimal new research on effective criminal justice strategies surfaced. As a result, the crime control model was developed between the 1980s and 1990s, referred to as the get tough on crime initiative, as noted by the author. Paretta (2018) suggested juvenile delinquency and recidivism are significant issues impacting communities throughout the United States. The author suggested the Crime Control Era entrenched various legislations for the purpose of getting tough on juvenile crime and resulted in the development of punitive boot camps, wilderness training, and scared straight programs.

Paretta (2018) suggested the get tough on crime programs in the 1990s were responsible for the increase in recidivism among juvenile offenders. The author noted the lack of resources for youth experiencing mental health challenges is a crucial barrier within the juvenile justice system. Community-based treatment approaches aimed to target the specific needs of juvenile offenders as opposed to assuming identical strategies will work for each youth are more favorable to reduce recidivism, as noted by the author. Additionally, the author suggested utilizing boot camps to punish youth offenders is counterproductive and increases the likelihood of juvenile recidivism. Furthermore, the author argued that the get-tough movement in the 1990s was unsuccessful in reducing recidivism and recommends that grant funding be used to study the impact of institutional responses on juvenile crime. Moreover, the author highlighted those punitive programs that focus on punishment should be replaced with more rehabilitative programs that promote personal well-being.

The get tough on crime initiative lasted from the mid to late twentieth century, in which juvenile court practitioners abandoned their initial diversion approach and transitioned to using

institutions to lock up youth offenders (Renfro, 2019; Myers, 2018). Bolin et al. (2021) suggested juvenile offenders were increasingly ordered to adult jails or prisons. The author noted the juvenile system shifted toward punitive policies that supported child labor, to children being tried and convicted as adults. Then, court systems enacted *parens patriae* that granted the government to act as a parent or guardian of a youth offender, as noted by Bolin et al.. Next, the authors validated juvenile court systems contrasted with less punitive approaches that focused on treatment and rehabilitation. Subsequently, juvenile justice systems retreated to harsher punishments and increased incarceration, as noted by the author. Finally, the author noted a new era arose, referred to as the *Kids are Different* era, that highlighted the crucial differences between juvenile and adult offenders and identified the need for a separate system and resulted in legislation that mandated age-appropriate sanctioning strategies that separated juvenile and adult offenders that were once ignored (Bolin et al., 2021; Feld, 2018).

Juvenile Justice Reform Act of 2018

Scott (2017) suggested the juvenile court system was established in the first half of the 20th century by states recognizing children should not be held as fully culpable for their actions as opposed to their adult counterparts. The author noted due to this distinction, there have been various studies conducted regarding adolescent brain development and impulse control. Various reform efforts became hyper-focused on the rehabilitation of offenders rather than punishment, as noted by the author. The Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974 established national standards for courts to follow regarding punitive sentences for youth offenders and provided support for state programs to take a comprehensive approach to crime prevention (Scott, 2017; Office of Juvenile Justice and Delinquency Prevention, 2022). The

Office of Juvenile Justice and Delinquency Prevention suggested Congress enacted the JJDP in 1974 to improve juvenile justice systems by emphasizing prevention and treatment.

The Office of Juvenile Justice and Delinquency Prevention (2022) suggested the JJDP Act was reauthorized in 2002. They reported that at this time, the Act authorized new grant funding for new initiatives and programs, broadened the scope of disproportionate minority confinement to disproportionate minority contact, authorized research and training for future expansion of the Act, and revised the Juvenile Accountability Incentive Block Grants program that is now referred to as The Juvenile Accountability Block Grants program and is part of the Omnibus Crime Control and Safe Streets Act. Additionally, the authors noted in 2018, the Juvenile Justice Reform Act (JJRA) was signed into law that amended the Juvenile Justice and Delinquency Prevention Act of 1974. In December 2018, Congress passed the Juvenile Justice Reform Act (JJRA) (Office of Juvenile Justice and Delinquency Prevention, 2019; Smoot, 2019; the University of South Carolina, n.d.). Smoot suggested the JJRA of 1974 was amended six times between 1974-2002, resulting in four distinct protections that the United States juvenile justice system practice today.

Smoot (2019) noted the JJRA of 1974 deinstitutionalized status offenders by ensuring youth cannot be detained for a status offense such as running away from home or truancy; however, an exception to this was if the status offense was determined to violate a pre-existing court order. Additionally, the author noted the JJRA of 1974 ensures youth are held in secure institutions away from adult inmates. Further, the author reported the JJRA guarantees youth will not be exposed to adult confinement, except in rare exceptions. The JJRA of 1974 mandated that states collect data on the race and ethnicity of offenders to address the overrepresentation of youth of color that exists in nearly every point of contact youth have with the juvenile justice

system, as noted by the author. Smoot confirms the 2018 reauthorization of the Juvenile Justice Reform Act focused on deinstitutionalizing status offenders and aimed to phase out the exception regarding violating court orders as a justification for youth lock-up.

Smoot (2019) suggested new provisions were added that mandated that courts must obtain factual evidence that a court order was violated or findings that support the reasonable cause to believe that the status offender violated an existing order. The author noted the JJRA of 2018 amends the adult jail and lockup removal core requirement and applies to youth in the juvenile justice system, excluding those that are facing charges in adult court. She reported if the court determines a youth should be placed in adult lock-up, the judge must reassess every 30 days, and a juvenile may not be held in an adult jail for more than 180 days prior to a final conviction. Further, the author suggested the JJRA of 2018 updated the Disproportionate Minority Contact core protection and reformed it to the Racial and Ethnic Disparities core requirement. The JJRA of 2018 requires individual states make proactive plans to determine how they will address the disparities that exist within their respective juvenile justice system and have measurable goals to make racial and ethnic inequalities clear, as noted by Smoot.

Scientific Findings in Juvenile Justice Reform

McInnis et al. (2020) suggested the United States Supreme Court has recognized the inability of juvenile offenders to understand their constitutional rights for over seventy years; however, courts continue to permit law enforcement to deny youth offenders their *Miranda* rights and continue to reprimand them through intimidation and manipulation. The authors noted scientific evidence supports that adolescent brain development undergoes four significant changes that youth experience. They suggested the first change is the decrease in gray matter in the prefrontal regions of the brain when unused neurons connections are eliminated. The authors

presented the second notable change is a significant increase in dopamine receptors that connect the limbic system and prefrontal cortex, enhancing pleasure and sensation seeking. They reported the third change is the increased nerves that connect the regions of the brain that strengthen the prefrontal cortex and limbic system; thus, it increases communication between different systems within the brain. Lastly, the authors noted an increase in white matter that results in myelination that improves cognitive brain functions such as the ability to plan, make difficult decisions, and measure risk versus reward before making a decision.

Evidence has revealed adolescent brain development is continuous throughout adolescence, and neurological and psychological immaturity can lead to crime among youth offenders (Scott et al., 2018). Weissman et al. (2018) suggested a deficiency in neurodevelopment processes combined with exposure to criminal activity within the community or neighborhood can increase a youth's vulnerability to the effects of community crime. Gur (2021) suggested the rate at which the human brain develops from conception to adulthood impacts an individual's behavior. The author indicated a variety of studies have been conducted regarding the development of adolescent brain tissue and its connectivity in relation to behavior. The evidence of the pertinent developmental stages of the brain indicates that youth rely on the decreased abilities of their brains, resulting in an increased likelihood of lack of impulse control, as noted by the author. Additionally, the author noted youth can be expected to act out and explore their environment, which may result in actions made without consideration of potential harm to others or likely negative consequences. Blomström et al. (2020) suggested the development of infections during crucial stages of brain development can contribute to aggressive behavior and various mental disorders that are associated with violent criminals.

Medical Findings Including Adverse Childhood Experiences and Crime

Evidence has revealed approximately 60 percent of criminal offenders have a substance use disorder (SUD) and care for a child under the age of 18. (Guastaferro et al., 2020; National Institute of Drug Abuse, 2020). Diagnosis of a substance use disorder increases the risk of child abuse and neglect among parents, which can lead to adverse childhood experiences for youth (Kepple, 2018; Jernbro et al., 2022; Maguire-Jack et al., 2022). Adverse Childhood Experiences (ACES) are traumatic events in an individual's childhood that may result in disturbing health outcomes and an increased likelihood of criminal behavior (Kappel et al., 2021; Miley et al., 2020; Day & Malvaso, 2021). An example of health effects includes toxic stress (Thompson et al., 2020). ACEs can increase recidivism and youth engaging in violent crime (Freeze, 2019; Baglivio & Wolff, 2017; Leban, 2021). Evidence has revealed that youth with a high ACEs score report an increased likelihood of substance use and criminal activity (Shin et al., 2018; Kowalski, 2019; Folk et al., 2021). ACEs can include abuse, neglect, and household dysfunction resulting in increased behavioral health needs for justice-involved youth due to increased substance use and psychiatric symptoms (Folk et al.; Perez et al., 2018).

Judicial Approach to Addressing Differences Between Children and Adults

Within the last decade, the Supreme Court has evaluated juvenile offenders differently than adults as an increased level of compassion, and child-focused policies have emerged (Troutman, 2018; Benekos & Merlo, 2019). As a result of the court case *Roper vs. Simmons* (2005), the Supreme Court ceased sentencing juvenile offenders using the death penalty (Roper vs. Simmons, 2005; Newey, 2019). Troutman suggested this case overturned a death sentence on a seventeen-year-old from a conviction of first-degree murder. The author noted that the court argued that the juvenile offender possessed a degree of reduced culpability and declared the death sentence unconstitutional for the youth. To sustain the Court's argument, they referred to

scientific findings regarding adolescent development, as noted by the author. As a result, the author reported that three general differences between juvenile and adult offenders were declared, including the lack of maturity and responsibility leading to undesirable behavior, increased vulnerability to negative influences by being exposed to peer pressure, and specific personality traits of juveniles that result in increased malleability. Additionally, the author indicated rulings in *Roper vs. Simmons* ultimately reformed juvenile sentencing thereafter.

Five years later, in the case *Graham v. Florida* (2010), the Supreme Court ruled the unconstitutionality of a sentence of life without parole for non-homicide juvenile offenders (Graham v. Florida, 2010; Dharmavarapu, 2019). Troutman (2018) suggested that Graham went a step further by recognizing that youth offenders are deserving of a meaningful opportunity for rehabilitation, thus, advocating for the meaningful opportunity standard. The meaningful opportunity for release standard mandates sentencing to consider time for maturity and rehabilitation, and non-incorrigible juvenile offenders must have the opportunity for release early enough in their lives for the opportunity to achieve personal growth by successful re-entry into society (Troutman, 2018; Tikhomirov, 2019). Troutman suggested the following year, the case *J.D.B v. North Carolina* ruled that a youth offender's age must be accounted for regarding Miranda analysis. In *J.D.B. v. North Carolina* (2011), a thirteen-year-old was escorted by a law enforcement officer to a conference room where two school administrators and additional law enforcement were present and began questioning J.D.B. regarding a series of neighborhood break-ins.

Out of the stolen items, a digital camera was found in J.D. B's possession; however, J.D.B. denied his involvement in the break-ins (United States Courts, n.d.). The United States Courts suggested the law enforcement officials continued to question J.D.B. for additional details

to which J.D.B. eventually confessed to his involvement and was charged by the state of North Carolina with breaking and entering and larceny. The authors reported the public defender who represented J.D.B. moved to redact the youth's statements as police interrogated him without a proper Miranda warning; however, J.D.B. was still adjudicated as delinquent. The authors noted J.D. B's attorney appealed with the North Carolina Court of Appeals and then with the North Carolina Supreme Court; however, he was unsuccessful in reversing the charges until the Supreme Court reviewed the case and reversed the judgment of the North Carolina Supreme Court. They reported the judge remanded the charges to a lower court to reconsider if J.D. B's age and mental status were relevant and should have been considered when determining police custody for Miranda purposes.

Troutman (2018) suggested an additional case in establishing that juveniles are significantly different from adults was *Miller v. Alabama.* In *Miller v. Alabama* (2011), the Court ruled that life without parole for juvenile offenders charged with homicide was unconstitutional under the Eighth Amendment of the United States Constitution. Troutman reported the rulings in *Miller v. Alabama* permitted juvenile offenders that were previously sentenced to life without parole to appeal their case and potentially receive a less punitive sentence that would provide a meaningful opportunity to spend a portion of their lives outside of incarceration. This ruling resulted in judicial officers having to predict the risk of danger of a youth offender in the future (Marshall, 2019). Troutman suggested these revolutionary cases regarding juvenile justice reform have strongly influenced how juvenile offenders are sentenced today. Furthermore, the author noted that considering a juvenile's age, brain development, characteristics of a juvenile's personality such as inability to make mature judgments, and exposure to peer pressure are all significant components to consider when judges are sentencing juvenile offenders.

Fairfax-Columbo et al. (2019) suggested that although there are no measures of long-term risk for juvenile recidivism, mental health professionals are increasingly summoned to address the long-term risk of criminality for juvenile offenders. The authors noted most juvenile delinquency behaviors will decrease over time as youth reach adulthood; however, it is paramount for mental health professionals to identify protective factors and implement effective interventions aimed at reducing reoffending amongst juvenile offenders. Wilson et al. (2019) suggested juvenile drug treatment courts continue to gain momentum to provide effective interventions for youth offenders. Baughman et al. (2019) reported drug courts are well suited to meet the needs of individuals experiencing substance use and co-occurring mental health disorders as they keep participants engaged through intensive programming and encourage complete abstinence from drugs. It is essential to review the term recidivism, as the term guided the present study, and the review will provide a heightened understanding of the goal of drug court programs.

Review of Recidivism

Bobbio et al. (2020) suggested juvenile delinquency is a massive concern throughout the world. Dressel and Farid (2018) argued algorithms such as risk assessment tools are commonly used to assess an offender's likelihood of reoffending once released from court-ordered supervision. The authors noted the results from assessments are utilized within the court process to determine pretrial, parole, and sentencing decisions in the future. It is crucial to define recidivism to evaluate the various factors considered when offenders are working through the justice system. Recidivism refers to any new contact that an offender has with the criminal justice system following the offender's initial offense (Brown & Scott, 2018; O'Donnell, 2020; John & Scurich, 2019). Fine et al. (2018) suggested youth with poor self-regulation or

criminalistic attitudes are at an increased risk for recidivism. Zettler (2021) indicated that trauma-informed treatment can assist in reducing behavioral concerns among juvenile offenders, thus, reducing adolescent violence and recidivism within residential facilities. This intervention could potentially aid in reducing recidivism if implemented in community-based juvenile drug court programs.

Common Themes Regarding Juvenile Drug Court Effectiveness of Recidivism

Belisle and Thompson (2020) noted approximately 1.08 million juveniles throughout the United States met the criteria for a substance use disorder. The authors conducted an exploratory study to examine if participation in juvenile drug courts impacts adulthood recidivism rates. Within 12 years, they measured adult recidivism rates between adolescent drug court participants and juvenile offenders that participated in traditional probation supervision with no drug court involvement. The authors revealed the gender of youth offenders under court-ordered supervision might be an influential factor in how juvenile participants experience the drug court program overall. Specifically, the authors found that females are less likely to be terminated from juvenile drug courts and have lower recidivism rates than their male counterparts. They further discovered that boys are eight times more likely than girls to be terminated and were four times more likely to receive a new referral while still participating in the drug court program. The author's discovered boys were twice as likely to recidivate after drug court programming and were 1.9 times more likely to be charged again with alcohol or drug-related crimes.

Kaiser and Rhodes (2019) suggested other specialized court programs have been established to address various offenses, such as mental health courts, behavioral health courts, homeless courts, and veteran's courts. The authors suggested many specialized courts rely on the original drug-court model as a framework for their respective programs. They further confirmed

the drug court model can be generalizable to other diversion programs. The authors revealed consistency between the various programs increases the number of offenders who can benefit from diversion programs instead of traditional incarceration or detention. A common theme in the existing literature is mental health resources are crucial and necessary for successfully rehabilitating youth participating in juvenile drug courts. Juvenile drug courts are increasing throughout the United States in response to increased substance use among youth (Hiller et al., 2021). Feder et al. (2018) conducted a study utilizing 105 adolescents involved in juvenile drug court, highlighting internalized symptoms and deviant behavior of participants' peers that were hypothesized to increase the likelihood of substance use by the participant. The authors revealed peers associated with juvenile drug court participants that engage in substance use resulted in an increased likelihood of substance use amongst drug court participants.

An additional common theme is the implementation of the 16 Strategies for Juvenile Drug Treatment Court is historically not uniform (Hiller et al., 2021; Becan et al., 2020). Hiller et al. suggested a multi-site study conducted in 2004 revealed significant variation existed in how juvenile drug courts were implemented. Consequently, this resulted in evaluators developing a survey to measure how court jurisdictions followed the 16 Strategies discussed previously, as noted by the authors. The authors suggested drug court practitioners and stakeholders discovered inconsistencies in implementing the strategies resulting in the needed reform for juvenile drug court programs to require evidence-based practices in their treatment processes. They argued inconsistencies included resources available, the curriculum did not address the specific, individualized, and unique needs of offenders, including treatment strategies that were developmentally appropriate and the importance of working with participants' families. However, in 2014, the authors suggested evaluators discovered additional concerns regarding the

impact of juvenile drug courts on recidivism. They sustained that the inconsistencies prompted the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to develop a six-year plan to evaluate the effectiveness of the drug court guidelines.

Choo et al. (2020) suggested little is known about how the 16 Strategies are practiced in the various jurisdictions across the United States. Becan et al. (2020) argued that despite the high prevalence of youth that meets the criteria for substance use disorders, most do not receive the necessary resources for successful rehabilitation. The authors conducted a study that analyzed 36 juvenile probation practices and drug courts across seven states to address unmet needs regarding substance abuse. The authors evaluated state-level juvenile justice departments, and evidence revealed discrepancies in the level of engagement between jurisdictions, whereby variation in how different jurisdictions focused their improvement efforts. They noted collectively the 36 jurisdictions analyzed placed the most emphasis on improving referral and treatment practices (78 percent). They reported out of the 36 jurisdictions, three or 8 percent focused on targeted screening goals, five jurisdictions, or 14% focused on assessment goals to discover participant needs, 14 or 39 percent focused on referral goals regarding assessment and treatment, eight or 22 percent focused on treatment initiation goals, and six or 17 percent focused on treatment engagement/continued care goals.

A significant concern with juvenile drug courts is their lack of uniformity across jurisdictions. However, this is not entirely the fault of the practitioners responsible for implementing the 16 Strategies, such as the treatment team. Mei et al. (2019 a-b) conducted a study of drug courts that evaluated how drug courts operated in adherence to the established practices. The authors revealed that not all drug courts are created equal, and there is significant variability between them. An example of this equity includes available grant funding, treatment

resources, and resources available in the jurisdiction's community. The authors noted the variability is a limitation regarding studying recidivism rates, as using only recidivism rates can result in incorrect or biased conclusions about the efficacy of the criminal justice program. To rectify this, the authors suggested the need for process evaluations to distinguish if the drug court program is working or not by the level of adherence to the established principles.

The 16 Strategies are federally established guidelines for the proper functioning of juvenile drug courts (United States Department of Justice, 2016). However, individual states and local jurisdictions have discretion on the different incentives and sanctions that can be utilized to increase positive outcomes. Evidence has revealed that if drug courts were uniformly flexible and adhered to the established principles, more positive outcomes would result (Phillipi et al., 2021; Pratt & Turanovic, 2019). Phillippi et al. suggested Louisiana were one of the first states to generate statewide standards from the national guidelines, and other jurisdictions can feasibly replicate their model. The authors offered that increasing the number of incentives and sanctions, increasing community service as a sanction, and decreasing juvenile detention effectively improve positive outcomes. Pratt and Turanovic suggested drug courts can reduce recidivism if they prioritize being more therapeutic than disciplinary. Establishing an influential drug court that is client-centered and focused on the individualized needs of participants is at the forefront.

A significant theme in the existing literature is the factors researchers have discovered have an increased likelihood of resulting in crime and delinquency. Researchers have found neighborhood factors such as proximity to police facilities and detention centers, proximity to residential areas that may increase the likelihood of property offenses, and other neighborhood factors play an essential role in youth behavior and future criminality after completion of the drug court program (Kennedy et al., 2019; Thompson-Dyck, 2022). Kennedy et al. examined the

relationship between known risk factors and recidivism rates. The authors studied 564 male and female youth offenders within the Juvenile Justice Division of the Eleventh Judicial Circuit of Miami-Dade County, Florida. Evidence has revealed that environmental factors such as the neighborhood youth live in showed the most significant statistical significance in influencing youth behavior, including substance abuse (Kennedy et al., 2019; Schmitz & Tyler, 2020). Kennedy et al. suggested neighborhood factors leading to undesirable behaviors include but are not limited to peer influence, family functioning, gang involvement, substance abuse, and academic success.

To rectify prior concerns regarding addressing juvenile drug court participants' unique needs, researchers have expressed the importance of service-matching programs. Korchmaros et al. (2017) suggested that service-matching has shown positive outcomes in identifying and meeting the needs of youth offenders. Two approaches the authors discuss in their study are the principles outlined in *Juvenile Drug Court: Strategies in Practice and Reclaiming Futures*. The authors argued when the two principles are combined, practitioners refer to them as JDC/RF programs that aim to increase the effectiveness of juvenile drug court programs. They further suggested that service-matching programs aim to produce better results by matching youth and their families to proper resources, services, and procedures that address their individualized needs. The authors highlighted the need for juvenile drug court treatment to implement approaches that focus on identifying and meeting the needs of participants. To successfully match youth to the proper resources, practitioners and stakeholders must use appropriate assessment tools to correctly identify the risk and needs of offenders to best address substance use and delinquency concerns.

An additional common theme in the literature is the importance of family engagement in court-ordered treatment. Family engagement is an essential aspect of the juvenile drug court program; therefore, courts provide various strategies to increase family engagement, such as flexible schedules, family therapy, and other family-based interventions (Mauro et al., 2017; Robertson et al., 2019). Mauro et al. suggested youth have increased motivation for treatment when family participation is increased. Additionally, they argued that although juvenile drug courts require involvement in treatment, youth and parent engagement in the services provided cannot be mandated as the program is voluntary. The authors discovered that increased engagement by parents and families of youth participating in the juvenile drug court program is associated with overall positive outcomes regarding youth performance. The authors conducted a study that compared parental engagement in Risk Reduction Therapy (RRTA) and Treatment as Usual (TAU) while their child participated in the drug court program.

Mauro et al. (2017) discovered when both parents are involved in their child's treatment, the youth is more motivated to succeed. Additionally, they studied if family-based SUD treatment in juvenile drug court programs influenced youth participation in treatment and enhanced clinical outcomes. The authors found that highly involved support systems from the youth's immediate family revealed clinical significance that youth and families could highly benefit from family-based substance use disorder (SUD) treatment. They further highlighted youth and families exposed to RRTA were more likely to report high engagement in treatment strategies offered to them instead of their TAU counterparts. Robertson et al. (2019) suggested parental involvement is essential for successful outcomes in court-ordered youth treatment. Simmons et al. (2018) confirmed the lack of parental involvement, specifically father absence, has shown to increase juvenile delinquency. Robertson et al. suggested drug court programs

should ideally provide caregiver engagement practices that emphasize educating parents or guardians about the favorable products regarding their child working through the juvenile justice system and encourage their children to take the program seriously to receive the highest benefit from the resources the drug court program has to offer.

Wilson et al. (2019) suggested recent literature has raised concerns regarding the effectiveness of juvenile drug courts instead of traditional juvenile justice processing. They presented a significant factor in the lack of effectiveness is that not all juvenile drug courts are entirely uniform in their policies and practices. Additionally, the authors noted the processes are inconsistent; however, the needs of youth also vary, and youth may have multiple mental health, academic, and social needs to be addressed. The authors further suggested when the needs vary, courts find difficulty in implementing the juvenile drug court model as initially intended to accommodate the individualized needs of participants. Bouffard et al. (2017) argued there is extensive literature on restorative justice programs; however, minimal research has been conducted on the effectiveness of the variations in the intervention. They suggested a notable weakness in therapeutic justice programs, like juvenile drug courts, is implementing programs that can lower recidivism rates is a significant policy challenge. Marder and Wexler (2021) reported empirical evidence supports the use of restorative justice programs and therapeutic jurisprudence to improve therapeutic outcomes for citizens.

The United States Department of Justice (2019) provided eligibility criteria for grant money applications to start, enhance, or expand a juvenile drug court program. Budget constraints are a limitation as if funding resources are unavailable, proper treatment interventions may not be available to youth participants. The United States Department of Justice suggested eligibility criteria are limited to states, territories, state courts, local courts, units of government,

and other interested parties. A limitation of information regarding the grants available is that if newly established drug courts have been included in studies regarding program effectiveness and recidivism, skewed results were likely due to not having uniform strategies in place. This writer suggests further research would be necessary to investigate drug courts that have been established for at least five years, are in the same state, and have equal resources available to them for an accurate comparison group regarding if juvenile drug courts are effective in reducing recidivism.

Proper Assessment Training of Drug Court Practitioners

McBride et al. (2018) argued practitioners responsible for conducting assessments and creating service plans for youth drug court participants must be well-versed and have professional training in conducting evidence-based risk assessments. The authors conducted a six-hour workshop that required practitioners to administer a risk assessment instrument and provide an opinion on the treatment options the juvenile would best benefit from during programming. The author's purpose was to expose adolescent psychologists to working with juvenile-justice youth. They discovered it is paramount for adequately trained psychiatrists to be administering risk assessments, and those that have proficient training in conducting evidence-based risk assessments will result in more professional opinions and referrals to best address the unique needs of drug court participants. As juvenile drug court provides a multidisciplinary approach to addressing the unique needs of youth with substance abuse concerns, the authors suggested proper assessments are required to identify the specific needs of the youth participant.

Gummelt and Sullivan (2017) highlighted two screening tools to investigate if the evaluation results could predict future recidivism in juvenile drug court participants. The authors aimed to discover if adolescent drug court participants benefit from the treatment team approach

offered by juvenile drug court programs and if the interventions provided in anger management, schooling, case management, mentoring, and other community and family-based services were beneficial to the participant. The authors suggested the first screening tool evaluated included using the MAYSI-2, which is a psychological assessment instrument used to identify co-occurring mental health issues simultaneous with alcohol or drug use. The authors found probation jurisdictions universally use the MAYSI-2 assessment to assess anger-irritability, somatic complaints, substance or alcohol use, suicidal ideation, history of trauma, feelings of anxiousness, or depression. They further reported an additional screening during the MAYSI-2 is thought disturbance; however, this component is for male participants only.

Gummelt and Sullivan (2017) suggested the second assessment is the POSIT, a questionnaire involving 139 yes/no questions that aim to identify substance abuse. Practitioners utilize the POSIT assessment to discover potential problem areas in substance abuse, mental and physical health, family relations, peer relations, social skills, educational status, vocational status, leisure/recreation, and aggression. They found neither assessment showed statistical significance in predicting the future recidivism of drug court participants. The authors suggested this could be due to youth under-reporting their symptoms, fearing future consequences. Although the results did not support the author's hypothesis that the assessments could predict future recidivism, the study had a robust research design that included comparison groups with a five-year follow-up time. The authors further discovered the evaluations studied have high reliability and validity. They argued a limitation of the study was the inability to measure attachment effectively and the period the study was conducted was minimal. The authors suggested with the consistency of the study, evidence may have adhered to different results.

Summary

This study sought to fill the gap in the literature related to recidivism rates amongst juvenile offenders that participated in juvenile drug court in a state located in the Southeastern region of the United States. This chapter introduced Wexler's (2014) and Winick's (1997) theory of therapeutic jurisprudence, which developed the theoretical framework of the study. The therapeutic jurisprudence theory investigates the adversarial areas of traditional law and sentencing and aims to provide alternative sentencing strategies to address the well-being of offenders through therapeutic or antitherapeutic interventions (Arstein-Kerslake & Black, 2020; Yamada 2021a; Marson et al., 2019). From the perspective of therapeutic jurisprudence, criminal justice practitioners such as judges, defense and prosecuting attorneys, probation officers, mental health professionals, substance abuse recovery coaches, and child welfare professionals collaborate on a multidisciplinary team to determine the best treatment interventions available to meet the needs of offenders participating in the drug court program, opposed to traditional punitive sentencing (Kahn et al., 2021; Lloyd-Sieger et al., 2021; Sheeran et al., 2022).

Since its inception, the adult drug court model has served as a framework for other diversion courts, such as juvenile drug courts and family treatment courts, as they provide programming designed to reduce drug relapse and recidivism amongst juvenile and adult offenders (United States Department of Justice, 2021b). Drug court programs achieve this by implementing intensive risk assessment, increased judicial appearances, supervision by the probation department, and a series of incentives and sanctions, treatment, and rehabilitation services (Mei et al., 2019 a-b; Gallagher et al., 2017). The literature review included an analysis of the existing literature regarding adult drug courts that have paved the development of juvenile drug courts and other related courts such as mental health courts, behavioral health courts, family treatment courts, domestic violence, and veteran's courts across the United States (Substance

Abuse and Mental Health Services Administration, 2020b). Evidence has revealed approximately 60 percent of people involved in the criminal justice system have a substance use disorder (SUD) and care for a child under the age of 18. (Guastaferro et al., 2020; National Institute of Drug Abuse, 2020).

Diagnosis of a substance use disorder increases the risk of child abuse and neglect among parents, which can lead to adverse childhood experiences for youth (Kepple, 2018; Jernbro et al., 2022; Maguire-Jack et al., 2022). Much of the research regarding the relationship between juvenile drug courts and recidivism amongst juvenile offenders suggests external factors such as adverse childhood experiences, peer influence, environmental factors such as poverty, lack of parental involvement, individual attitudes, and lack of self-control highly influence juvenile delinquency and recidivism (Perez et al., 2018; Bobbio et al., 2020; Simmons et al., 2018). Several researchers have investigated how adverse childhood experiences (ACE) impact juvenile crime and recidivism (Freeze, 2019; Baglivio & Wolff, 2017; Leban, 2021). Others have highlighted co-occurring mental health and substance use concerns in youth offenders leading to crime (Turner, 2022; Kim et al., 2019; Schmitz & Tyler, 2020). A variety of research shows the effectiveness of juvenile drug courts regarding a reduction in recidivism (Hartsell & Novak, 2022; Guillemet, 2019).

There is limited research regarding the specific evidence-based interventions provided to juvenile offenders during drug court programming to assist in reducing recidivism. It is also unknown if the interventions in the Southeastern region state are individualized to meet the needs of youth offenders and are understood through the theoretical lenses of Wexler and Winick's theory of therapeutic jurisprudence since there is currently no existing literature regarding the region studied. The current literature calls attention to the need to investigate the interventions

presently utilized in the juvenile drug court program to enhance, expand, and reform where necessary. This study aimed to fill the gap in the literature regarding the uniformity of juvenile drug court programs regarding the established guidelines from the federal government. Targeting juvenile offenders that would receive the highest benefit from programming offered through juvenile drug courts is paramount. This study aimed to discover if participation in juvenile drug court is noteworthy in reducing recidivism amongst juvenile offenders. This writer hypothesized that juvenile drug court graduates that received evidence-based treatment were less likely to recidivate within three years, there is a difference in recidivism depending on where the participant received treatment throughout the state, and participation in juvenile drug court reduces overall recidivism in graduating participants three years post-program completion.

CHAPTER THREE: METHODS

Overview

Belisle and Thompson (2020) reported over one million youth throughout the United States meet the criteria for a substance use disorder. A significant problem is crimes involving controlled-substance violations comprise the third-largest category of offenses, confirming a public health crisis. This chapter will describe the research design utilized throughout the study. A rationale for why the selected method is most appropriate for the study will be highlighted and supported by existing literature on recidivism studies. The purpose of the chosen research design will be delineated. The research questions investigated juvenile drug courts' impact on reducing recidivism. The study aimed to discover if participation in juvenile drug courts was influential in reducing criminal behavior three years following the completion of the drug court program. Additionally, the study aimed to measure adherence to the 16 Principles of Juvenile Drug Courts established by the United States Department of Justice (2016) regarding mandatory use of evidence-based practices. The therapeutic jurisprudence theory developed by Wexler and Winick (2015) was the relevant theoretical framework that connected the study to the existing literature to provide a basis for the hypotheses and appropriate choice of research methods.

Design

This writer conducted a quantitative quasi-experimental longitudinal study with a pre-test and post-test research design to investigate the effectiveness of juvenile drug court treatment on reducing recidivism rates amongst adolescent drug court participants three years after completing the juvenile drug court program. A quasi-experimental design was selected for the study as the study aimed to evaluate the association between an intervention and an outcome (Schweizer et al., 2016). The intervention analyzed in the study was the use of evidence-based treatment

strategies during drug court treatment. Schweizer et al. suggested that quasi-experimental designs can be categorized as time series designs, designs with control groups, and designs without control groups. For this study, the design had a treatment group including the juvenile drug court participants receiving evidence-based treatment. The control group in the study included the adolescent drug court participants who did not receive mandated evidence-based treatment as required by the 16 Strategies of Juvenile Drug Court introduced by the National Drug Court Institute and the National Council of Family Court Judges.

Astrada (2018) suggested juvenile drug courts aim to reduce recidivism rates for at-risk youth and vulnerable populations, including the mentally ill, addicts, and the homeless. The study explored recidivism rates amongst juvenile drug court graduates three years post-program completion. This writer collected recidivism data from 2015, 2016, 2017, and 2018 graduating cohorts, including 445 participants in the Southeastern region. The study examined if graduates received evidence-based strategies during their drug court programming to draw conclusions regarding the effectiveness of the drug court program. Therapeutic jurisprudence (TJ) theory developed by Wexler and Winick, defined as “the extent to which substantive rules, legal procedures, and the roles of lawyers and judges produce therapeutic or antitherapeutic consequences” (Perlin, 2017, p. 3) provided the theoretical framework for the study. The research design was the most appropriate for the study as the study examined the impact of juvenile drug court intervention on recidivism rates amongst juvenile drug court graduates. Additionally, the study investigated the availability of evidence-based treatment strategies. The study's overall goal was to examine recidivism data and the evidence-based treatment provided to juvenile participants to discover if the current treatment strategies were effective in reducing recidivism.

Research Questions

RQ1: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion?*

RQ2: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion?*

RQ3: *Is there a difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018?*

Hypothesis(es)

$H_0$1: There is no statistically significant change in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion.

$H_0$2: There is no statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion.

$H_0$3: There is no difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018.

Participants and Setting

The participants for the study were drawn from a state government agency located in a state located in a southeastern region. The participants included statewide juvenile drug court

graduates from 2015, 2016, 2017, and 2018. The cohort participated in the juvenile drug court program between 2014-2018 in various jurisdictions throughout the state. The agency that provided the data was located in the state's central region, inside the capital city. For this study, the number of participants sampled was 445. The specific years were chosen to represent the highest graduating cohorts within the last decade and provide a comparison of post-program reconstruction in 2018. The sample was directly collected from the state drug court department and is a statewide representation of the graduates for the specified years. The sample pool for the study was the youth participants of the Southeastern region studied. The type of probability sample for the analysis was a complete enumeration of study subjects.

The individual characteristics of participants in the study were graduates between the ages of 13 and 19, had charges that were non-violent in nature to be eligible for the juvenile drug court program, met the criteria for a substance use disorder, or had a significant substance abuse problem that led to problems in the home, community, school setting, and others, and were under the jurisdiction of the state. Additionally, the sample was divided by participants that received evidence-based treatment and those that did not, age, and differentiated by county treatment was received to examine the availability of resources. The participants were drawn from a state agency located in a rural Appalachian, Southeastern region of the United States. The agency is located in the central region of the state.

The study population was male and female juvenile offenders that graduated from the juvenile drug court program in 2015, 2016, 2017, and 2018. The population included all race and ethnicities and were not specific to one race or culture. For this study, the number of participants sampled was N=445. Feinn and Sullivan (2012) suggest according to Cohen, effect sizes are classified as small ($d= 0.2$), medium ($d= 0.5$), and large ($d \geq 0.8$). The sample came from 19

different juvenile drug court programs throughout the state. The age of participants was between the ages of 10-19. For this study, the design had a treatment group including the juvenile drug court participants receiving evidence-based treatment. The control group in the study included juvenile drug court participants who did not receive mandated evidence-based treatment.

Instrumentation

The instrumentation in the study included archival data on juvenile drug court graduates. Additionally, graduate recidivism rates in the Southeastern region studied were explored. An Excel document was administered to the state agency administrative department responsible for maintaining recidivism data. This researcher created an Excel document that included rows and columns for the agency to report information on juvenile drug court graduates such as age, gender, if the graduate received evidence-based treatment, education status, employment status, and recidivism data, including re-arrests and reconvictions. The document protected the anonymity of participants as the agency was asked to assign a unique identifier to participants other than their names. Recidivism data that were reported included recidivism data three years following drug court completion. Data analysis was conducted by examining descriptive statistics, conducting the Chi-square Test of Independence, and multiple linear regression statistical testing to explore recidivism rates of juvenile drug court participants.

Secondary Archival Data

Conducting a review of archival data from state agencies is an effective quantitative data collection method (Grand Canyon University, 2021). Grand Canyon University suggested archival data review can concern public records such as census records, or personal documents. The authors indicated the importance of identifying the type of information the researcher seeks before beginning to review the data. For the scope of this study, the archival data included re-

arrest and reconviction data on juvenile drug court graduates. It is important to note, the analysis included all recidivism data on all types of offenses, including status offenses for offenders that were still under the age of 18 when they reoffended and misdemeanors and felonies for the participants that reached adulthood. The use of archival data review has been used in several studies to study recidivism (The Bureau of Justice Statistics, n.d.; Yukhnenko et al., 2020; Point Park University, 2021).

The Bureau of Justice Statistics (n.d.) suggested they collect criminal history data from the FBI and state record repositories to study patterns in recidivism amongst probationers and those released from prison. The authors reported the most recent study investigated recidivism patterns of approximately 400,000 individuals released from state prisons in 34 states. Additionally, they indicated they have utilized criminal history records to examine the recidivism of individuals placed on federal community supervision in 2005. Yukhnenko et al. (2020) conducted a study comparing recidivism rates between countries by conducting a systematic review of prisoners' recidivism rates. The authors included reports and analyses of released prisoners from various countries that reported re-arrest, reconviction, and reincarceration rates. Results from their study revealed that of the 50 countries studied with the largest populations, 10 reported recidivism rates for prisoners, and the most commonly reported was a 2-year reconviction rate, as noted by the authors.

Point Park University (2021) suggested that juvenile recidivism rates are defined as the number of minors that get convicted of a crime, serve their time, are released, and are later convicted and incarcerated again for a new offense. The authors suggested that unlike adult recidivism, there are no national figures available for juvenile recidivism rates. However, a study conducted by the CSG Justice Center in 2015 investigated data from 39 states that collect

recidivism data, as noted by the authors. The authors noted the study revealed juveniles are more likely than adults to commit another offense following release from incarceration. Additionally, the authors noted a study conducted by Joseph Doyle that utilized recidivism data on 30,000 juvenile offenders revealed 40 percent of juvenile offenders ended up in adult prison for crimes committed by the time they reached the age of 25.

An additional study that utilized archival data on recidivism was conducted by the Connecticut State Department of Correction (2022). The authors suggested the most recent study of recidivism was completed in 2012 by the State Criminal Justice Policy and Planning Division of the Office of Policy and Management. The study followed approximately 14,500 male offenders sentenced to prison for five years following their release or discharge. The authors reported that within five years following release, 79 percent of offenders were re-arrested, 69 percent were convicted of a new crime, and 50 percent were returned to prison with a new sentence. A separate study conducted by the Center for Alcohol and Addiction Studies at Brown University and the Schneider Institute for Health Policy, Heller School at Brandeis University studied the effects of substance abuse treatment on offenders that had been released between 1996 and 1997, as noted by the Connecticut Department of Correction. The authors reported the study results indicated that inmates that had received treatment from the Department of Corrections Tier Substance Abuse Treatment Program were significantly less likely to be rearrested. Results reported a 32.5 percent rearrest rate amongst those offenders, as noted by the authors.

The local state governing agency in this writer's study granted this writer permission to use the instrument for the analysis. Maslakci and Sürücü (2020) suggested validity in a study involves ensuring the measuring instrument measures what is intended. The authors noted

reliability consists of the stability of the values measured, indicating that the study would adhere to the same results if repeated measures were conducted. Ahmed and Ishtiaq (2021) reported validity and reliability are essential in the assessment of any measuring methodology for data collection. The authors noted validity involves what the study instrument measures and how well it evaluates the data. It is essential to note reliability alone is insufficient to ensure the validity of a study instrument, as indicated by the authors. Validity was secured by requesting data for the study instrument directly from the state agency responsible for collecting the data. Confidentiality was paramount in the study to protect participants' personal information, such as their names. The study did not require signed confidentiality agreements with the local agency as the data retrieved will not include identifying information.

Procedures

The first step in the study was deciding the subject matter to be investigated, including identifying the current problem of juvenile recidivism and determining what to discover from the study by developing research questions. The second step was to identify how to research the effectiveness of juvenile drug courts by first examining if there was any existing literature on juvenile drug courts while simultaneously investigating national recidivism rates amongst juvenile drug court graduates from prior years. The third step in the study was to align the equipment needed, including confidentiality agreements, obtain permission from the local state officials to conduct the study, secure where the archival data would come from, and investigate the legal requirements necessary to perform the analysis, such as approval from the Institutional Review Board (IRB) to conduct the research. The fourth step was to gain acceptance by the IRB to conduct the study. Following IRB approval, the study was then executed.

The study was initiated by first administering a researcher-made Excel document to the state governing entity providing the numerical data for the analysis. The purpose of the Excel document was for data collection on the data points for the study, including age and gender, whether the graduate received evidence-based treatment, whether the graduate was re-arrested or reconvicted of a crime within the three years following program completion, and if the conviction was a misdemeanor or a felony. The Excel document requested that each drug court graduate be given a unique identifier excluding their name to protect the identity of participants. This researcher pre-screened the data amongst all 445 participants from 2015, 2016, 2017, and 2018 cohorts to ensure all data was available and complete. Following data screening, this writer prepared for statistical analysis. After the data was solidified, this writer inputted the data into the SPSS statistical analysis software and conducted the proper tests needed to reach the results to answer the research questions.

Data Analysis

As the researcher, or human instrument in the study, this writer's role was to conduct a quantitative quasi-experimental longitudinal study with a pre-test and post-test design to investigate the effectiveness of juvenile drug courts in reducing recidivism rates. The study involved utilizing a data collection instrument distributed to the local governing agency and collecting data on recidivism rates of juvenile drug court graduates. There was no personal relationship between the researcher and the participants involved in the study, thus eliminating the risk of biases. Data analysis included measuring adherence to the 16 Principles of Juvenile Drug Courts by administering the data collection Excel document that requested the agency to record data regarding the use of mandated evidence-based practices. Additionally, a significant segment of the study involved the demographics of participants to obtain a deeper level of

understanding and transparency of the population under consideration. The goal of the study was to discover if participation in juvenile drug courts was influential in reducing recidivism rates among youth offenders as they reach adulthood. Additionally, the study sought to investigate drug court model adherence. The study utilized data from the local state governing agency responsible for collecting recidivism data. Participant identities were protected to ensure anonymity.

Once the recidivism data was collected, this writer inputted the data into the statistical analysis tool, SPSS. A Chi-Square Test of Independence was conducted with a $p < 0.05$ significance level to test the null hypothesis to determine if there is a statistically significant difference in recidivism amongst juvenile drug court graduates that received evidence-based treatment three years following drug court completion. The Chi-Square Test for Independence was used to examine whether two variables are independent or not (University of Utah, 2022). The dependent variable in the study was the rate of recidivism for drug or alcohol-related offenses, as recidivism is what was measured and relied on the reconvictions of juvenile drug court graduates. The independent variables are age, treatment location, and whether participants received evidence-based treatment. The statistical analyses were conducted to measure whether the experimentally observed results were consistent with the null hypothesis.

Following the Chi-Square Test of Independence, a multiple linear regression statistical analysis was used to investigate the correlation between recidivism based on age and whether the participant received evidence-based treatment. A linear regression is a statistical method that allows researchers to summarize and analyze the relationship between two continuous variables (Penn State, 2018e). Penn State suggested one variable in the linear regression is the predictor, explanatory, or independent variable. The authors suggested the second variable is the response,

outcome, or dependent variable. In this study, the predictor variables were evidence-based treatment, age at graduation, and location where treatment was received concerning the nineteen drug court programs. The response variable was the rate of recidivism of juvenile drug court graduates. To measure the effectiveness of the juvenile drug court program, recidivism data amongst juvenile drug court graduates three years post-program completion was reviewed. Linear regression analysis has been conducted in various studies measuring recidivism (Mulder et al., 2011; Leng et al., 2022).

Mulder et al. (2011) conducted a study to determine risk factors that predict overall recidivism and the severity of recidivism amongst juvenile offenders. The authors noted a linear regression model was used to examine which risk factors such as peers, substance abuse, psychological factors, and behavior during treatment were predictive in increasing recidivism. The study followed the participant's two years and utilized data collected from official reconviction data of 728 offenders. Results from this study revealed an 80% recidivism rate amongst the juvenile offenders studied, indicating that 20% of the population were not yet reconvicted, as noted by the authors. Leng et al. (2022) conducted a simulation study to improve the information database on prisoners that have been released by measuring behavior data of specific populations regarding recidivism rates. They noted prisoners with poor performance while incarcerated have a heightened risk of committing crimes again once released. The authors applied a linear regression to predict the possibility of recidivism amongst specific populations of released prisoners. They reported the behaviors of participants, and the multi-dimensional behavior data of the year studied were analyzed and revealed the tendency prediction of the population to commit crimes again by statistical analysis.

Summary

The study aimed to investigate the effectiveness of participation in juvenile drug courts on recidivism rates amongst youth participants three years following program completion. The quantitative quasi-experimental longitudinal study with a pre-test and post-test research design was selected to best address and explore the scope of the study. The quasi-experimental study aimed to discover if the current evidence-based practices help reduce recidivism by exploring recidivism rates of juvenile drug court participants. Additionally, the study investigated how the juvenile drug court adhered to the 16 Principles of Juvenile Drug Courts to ensure programming is correctly implemented by practitioners and participants receive the proper treatment to meet their individualized needs throughout the state. This writer administered a researcher-made data collection Excel document to the local state governing agency to collect numerical demographic and socioeconomic data on the study participants. The results from the Excel document were used to discover if treatment resources are uniform throughout the state to highlight factors that may influence recidivism, such as access to appropriate treatment resources.

Future research is necessary to discover if specific evidence-based practices are more effective in reducing recidivism than others. The chapter has highlighted data collection methods used throughout the study. The study utilized a complete enumeration sampling method as the whole population is accessible (Elfil & Negida, 2017). A Chi-Square Test of Independence and multiple linear regression were used to determine if there was a statistically significant change in recidivism rates amongst juvenile drug court graduates that received evidence-based treatment three years post-program completion. Additionally, the study investigated recidivism rates amongst juvenile drug court graduates that received evidence-based practices based on age at the time of graduation. Finally, the study examined recidivism rates by county of supervision.

Limitations in the research design, methods, and data have been discussed. Existing literature on recidivism rates amongst juvenile drug court participants were used to investigate current trends in criminal behavior amongst youth after successful completion of drug court treatment. The study was conducted in a non-participant atmosphere, and this writer ensured anonymity by omitting the juvenile drug court participants' names and other identifying information. The research findings are listed in the succeeding chapter.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative quasi-experimental longitudinal study was to explore recidivism rates amongst juvenile drug court graduates from 2015, 2016, 2017, and 2018. This writer tracked recidivism rates of graduates three years following completion of the juvenile drug court program to determine the overall effectiveness of the community-based, judicial treatment approach. The study aimed to investigate recidivism rates amongst juvenile drug court graduates that received evidence-based treatment during programming within three years following completion of the program. Additionally, the study examined recidivism rates for participants that received evidence-based treatment based on age to highlight if an offender's age at the time of graduation influenced future recidivism. Finally, the study investigated if there was a noteworthy difference in recidivism depending on where the participant participated in juvenile drug court across nineteen separate juvenile drug court programs throughout the state. The focus of this chapter is to present the findings of the research. The following research questions guided the study:

RQ1: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion?*

- $H_0$1: There is no statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion.
- H_a1: There is a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion.

RQ2: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion?*

- $H_0$2: There is no statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion.
- H_a2: There is a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion.

RQ3: *Is there a difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018?*

- $H_0$3: There is no difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018.
- H_a3: There is a difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018.

This chapter commences with a detailed summary of the basic features of the dataset used for the study, referred to as descriptive statistics. Next, the study results are presented in various tables, succeeding this writer in fulfilling a series of comprehensive statistical analyses, including a Chi-square test of Independence and multiple linear regression. The results herein are organized according to each of the hypotheses. Additionally, each null hypothesis is described and identified, and the corresponding statistical test for each hypothesis follows. Data screening was addressed for each statistical analysis technique to ensure this writer organized the data appropriately. The thorough review of the data affirmed all data needed to address the research questions were included in the dataset. Finally, the study's revelations that answered each research question are presented.

Descriptive Statistics

The study participants included 445 juvenile drug court graduates from 2015, 2016, 2017, and 2018 representing the total juvenile drug court graduates throughout the state studied. The total subjects included 298 males and 147 females ranging from 13 to 19 years of age. The mean age of the research subjects at the time of graduation was 16.64, with a standard deviation of 1.2. The median age of the subjects was 17, and the mode was 17 years of age. Of the juvenile drug court graduates studied, 90.1% were Caucasian, and 4.5% were African American. The remaining 5.3% of the research subjects were either multi-racial or unknown/other.

According to the United States Census (2022), youth aged 18 and younger currently account for 20.1% of the total population in the state studied. The author noted in 2015, 92.3% of the total youth living in the state were Caucasian, 3.5% were African American, and the remaining 4.2% were either multi-racial, unknown, or other. In 2016, 92.5% of juveniles were Caucasian, 3.5% were African American, and the remaining 4% were other or unknown, as noted by the Census. They reported in 2017, 92.2% of youth were Caucasian, 3.5% were African American, and 4.3% were multi-racial, unknown, or other. Finally, the authors reported in 2018, 92.1% of the juvenile population were Caucasian, 3.5% were African American, and 4.4% were multi-racial, unknown, or other.

The number of graduates of each gender separated by age were as follows: Age 13 included one male and two female graduates (.67% of the total graduates), age 14 included 10 males and 10 females (4.49% of the total graduates), age 15 included 38 males and 18 females (12.5% of the total graduates), age 16 included 68 males and 33 females (22.6% of the total graduates), age 17 included 94 males and 50 females (32.3% of the total graduates), age 18 included 81 males and 34 females (25.8% of the total graduates), and age 19 included 6 males

and 0 females (1.3% of the total graduates). The data was collected from the state agency responsible for collecting and storing recidivism data of juvenile drug court participants. The study's geographical area included a state in the southeastern region of the United States. In the state studied, 19 active juvenile drug court programs are currently operating throughout the region. Table 1 illustrates the frequency of race, gender, and age at the time of graduation out of the total number of subjects.

Table 1

Descriptive Statistics: Participant Age, Gender, and Race at the Time of Juvenile Drug Court Graduation

	N	Range	Min	Max	Mean	Std. Dev.	Variance	Skewness	Kurtosis
Gender	445	1	1	2	1.3	.47	.22	.72	-1.48
Race	445	3	1	4	1.16	.52	.27	3.39	11.01
Age at Graduation	445	6	13	19	16.64	1.2	1.43	-.550	-.23
Valid N	445								

Note. N=445. Research subjects were, on average, 16.64 years old (SD = 1.195), and participant age did not differ by condition. Gender was categorized into four separate groups. Graduates ranged from 1-4 and were classified as White (1), Black/African American (2), Multi-racial (3), or Unknown (4).

Results

An extensive review of the data was conducted before performing any statistical analysis to detect data entry errors, coding errors, outliers, or irregularities that may have been present in the dataset, thus, ensuring accuracy in addressing the research questions (Abulela & Harwell, 2020). To address Null Hypothesis 1, a histogram was produced to highlight if there was any data missing, illustrated in Figure 1. Upon review of the histogram, it was determined that there

were 445 participants indicating there was no missing data, and all graduates from the respective years were included in the analysis.

Following the results of the Chi-square test, before conducting the multiple linear regression, the presence of violations of the assumptions of linearity (Figure 2.), normality (Table 7.), multicollinearity (Table 8.), and homoscedasticity (Figure 3.) was investigated (Northeastern University, 2019). Northeastern University suggested multiple linear regression requires at least two independent variables. The variables can be nominal, ordinal, or interval/ratio, as noted by the author. The authors noted that the relationship between the independent and dependent variables must be linear to conduct a multiple linear regression. Osborne and Waters (2002) reported multiple linear regression can accurately estimate a relationship between the independent and dependent variables if the connections are deemed linear. If non-linearity exists, there is a risk of underestimating the true relationship between the variables under consideration, as noted by the authors.

To address Null Hypothesis 2, histograms were used to display the distribution of the numeric variables in the dataset and to illustrate any patterns within the data (The University of Texas, 2015). Reviewing the data was crucial to investigate the accuracy, skewness, and kurtosis. Skewness is a measure of symmetry or asymmetry, and kurtosis is a measure of whether the data are heavily tailed or light-tailed otherwise referred to as peakedness (National Institute of Standards and Technology, n.d.). The University of Cambridge (2018) suggested the values for asymmetry and kurtosis between -2 and +2 are acceptable to indicate a normal distribution. Table 13 and Figures 4 and 5 illustrate a normal distribution of the data points, site of supervision, and recidivism indicating the data was not skewed.

Figure 4 illustrates a histogram of a normal distribution of the dataset, including the 19 individual sites reflecting the various drug courts operating throughout the state. The graph revealed data points that fell approximately bell-shaped and symmetric about the mean; therefore, the data was deemed normally distributed (Mishra et al., 2019). Figure 5 also illustrates a normal distribution regarding recidivism rates amongst drug court graduates. Skewness of the data results when lower values distort the mean by lowering it (negative skew) or increasing it (positive skew) (Slitch, 2020). All data in the data set were deemed normally distributed as their values fell between -2 and +2.

To address Null Hypothesis 3, Table 16 illustrates the total number of participants separated by year that graduated from juvenile drug court. It was determined that all participants were included in the analysis, N=445. Also included in the table is the number of graduates that reoffended within three years following completion of the drug court program. In 2015, there were 104 juvenile drug court graduates. Secondly, in 2016, 139 graduates completed the program. Third, in 2017, 107 participants finished the program. Lastly, in 2018, 95 participants graduated from the juvenile drug court program. Succeeding Table 16, a representation of the percentage of recidivism rates per year was provided in Figure 6.

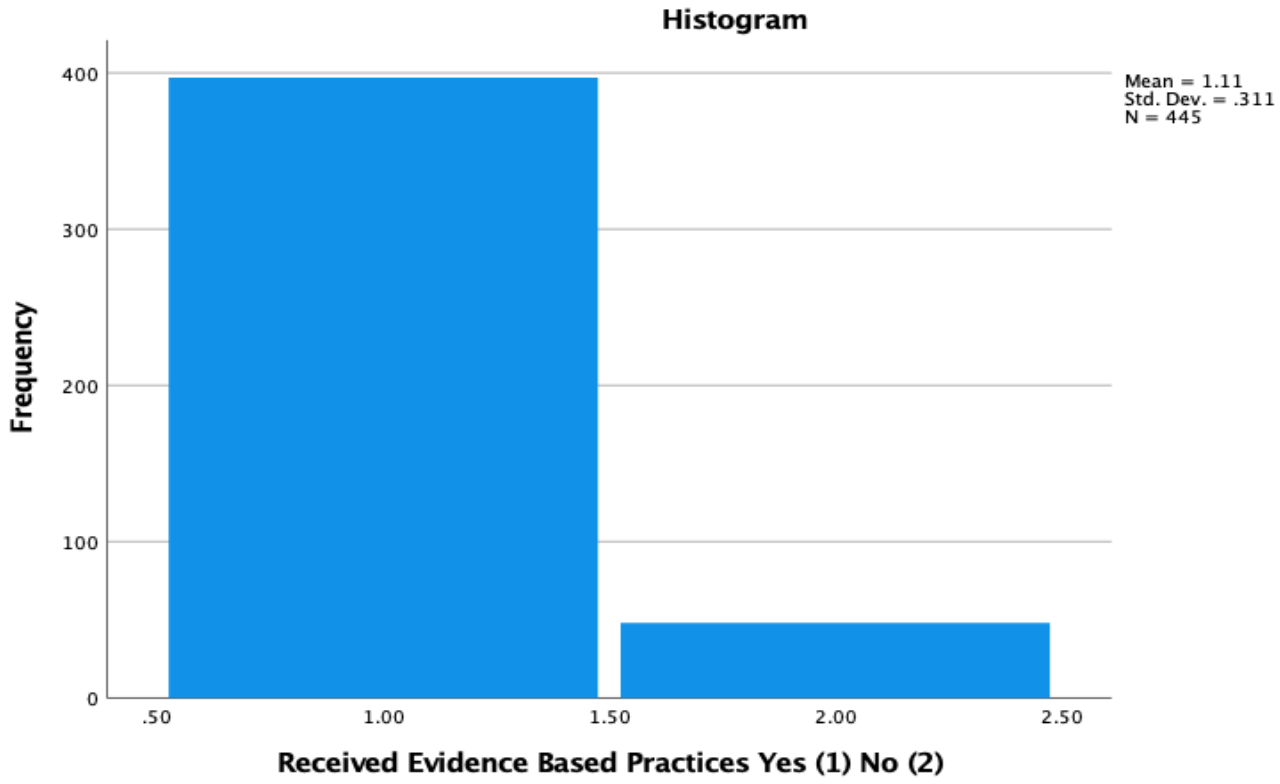
Null Hypothesis 1

The first null hypothesis $H_0$1: stated that there is no statistically significant change in recidivism rates amongst juvenile drug court graduates that received treatment utilizing evidence-based practices three years following program completion. For this hypothesis, a Chi-square of Independence test was conducted. Following the Chi-square test that investigated recidivism rates among graduates that received evidence-based treatment, multiple linear regression was performed to include the variable age. As mentioned, studies have been

conducted to view age at time of first offense, however not age of an offender at the time of a specific treatment intervention. The study aimed to explore if an offender's age at the time participation in juvenile drug court influenced recidivism when paired with whether the graduate received evidence-based treatment.

Figure 1

Histogram for Null Hypothesis 1



Note: Figure 1 illustrates a complete enumeration of the study subjects, N=445.

Assumption Testing for Chi-Square Test of Independence

For the study, ratio variables were used (age, year, and evidence-based treatment) to conduct the Chi-square test of Independence. Ratio variables have a true zero value (Centers for Disease Control and Prevention (CDC), 2012). Ratio variables were used so further correlation and regression techniques could be performed feasibly throughout the study to strengthen

relationships between the variables, where applicable. By doing this, a notable result was found regarding an offender's age when they participated in juvenile drug court. The Chi-square test was used for the variables under consideration as the values were reported as frequencies indicating the number of times a value occurred in the data set (The University of Hawaii, n.d.).

McHugh (2013) suggested that the Chi-square test can provide information on the significance of observed differences and which categories account for any differences found. To perform a Chi-square analysis, specific assumptions must be met, as noted by the author. The author suggested for the Chi-square test of Independence, the data in the cells should be reported as frequencies indicating counts of cases instead of percentages. Categories must be mutually exclusive such that each subject fits in only one category, and each research subject may contribute data to only one cell. Additionally, study groups should be independent, variables must be measured as categories at the nominal or ordinal level, the value of the cell expected counts should be five or more in no less than 80 percent of the cells, and no cells should have an expected count of less than one, as noted by McHugh.

The University of Utah (2022) affirmed assumptions of the Chi-square test and added that the data must be randomly selected to minimize potential biases, the variables must be nominal or ordinal, the test statistic must follow a chi-square distribution, and the conclusion of the test is contingent on whether the result statistic is greater than the chosen alpha level. For the scope of this study, the alpha level was set at $p < .05$. Mchugh (2013) reported the Chi-square test does not require equality of variances among the study groups. Additionally, the Chi-square does not require homoscedasticity in the data, as noted by the author. Although the Chi-square statistic is a non-parametric or distribution-free analysis tool, Table 2 illustrates a normality test on the data, referred to as the Kolmogorov-Smirnov test (Aslam, 2020). The Kolmogorov-

Smirnov test was conducted on the data in which it was determined that the data were normally distributed.

Table 2

Kolmogorov-Smirnov Test for Null Hypothesis 1

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	*df*	Sig.	Statistic	*df*	Sig.
Received Evidence-Based Treatment	.52	445	.000	.36	445	.000

Note: Illustration representing a normal distribution among the study variable, Received evidence-based treatment.

Chi-square Test of Independence Results

A Chi-square test of independence was conducted to test Null Hypothesis 1. The analysis aimed to investigate differences in recidivism rates amongst juvenile drug court graduates collectively that received evidence-based treatment three years following graduation from the juvenile drug court program. Table 3 illustrates that statistical significance was found based on the treatment received; thus, rejecting the null hypothesis was warranted. With the result of the p-value, $p = < .001$, there was sufficient evidence to report that the alternate hypothesis was true; thus, indicating that there was a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion.

To further support and affirm the results for Null Hypothesis 1, an additional Chi-Square test of Independence was conducted on recidivism rates of juvenile drug court graduates who received evidence-based treatment during programming broken down by each year following graduation. Table 4 illustrates one year following completion of the program, Table 5 illustrates

two years following, and Table 6 illustrates three years following completion of the juvenile drug court program.

Table 3

Chi-Square Test of Independence: Cumulative Recidivism Rate Within Three Years of Graduating Juvenile Drug Court for Participants that Received Evidence-Based Treatment

	Value	*df*	Asymptotic Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	36.540a	1	<.001		
Continuity Correction[b]	34.988	1	<.001		
Likelihood Ratio	48.302	1	<.001		
Fisher's Exact Test				<.001	<.001

Note: Statistical significance was found at the $p < .001$ significance level for Research Question 1.

Table 4

Chi-Square Test of Independence: Recidivism Rates for Juvenile Drug Court Participants that Received Evidence-Based Treatment One Year After Completion

	Value	*df*	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	28.465a	1	<.001		
Continuity Correction[b]	26.966	1	<.001		
Likelihood Ratio	38.785	1	<.001		
Fisher's Exact Test				<.001	<.001
N of Valid Cases	445				

Note. Statistical significance was found for recidivism within the first year after completing juvenile drug court treatment for participants that received evidence-based treatment.

Table 5

Chi-Square Test of Independence: Recidivism Rates for Juvenile Drug Court Participants that Received Evidence-Based Treatment Two Years After Completion

	Value	*df*	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.372a	1	.01		
Continuity Correction[b]	5.192	1	.02		
Likelihood Ratio	8.539	1	.00		
Fisher's Exact Test				.01	.01
N of Valid Cases	445				

Note. Statistical significance was found for recidivism within the second year after completing juvenile drug court treatment for participants that received evidence-based treatment.

Table 6

Chi-Square Test of Independence: Recidivism Rates for Juvenile Drug Court Participants that Received Evidence-Based Treatment Three Years After Completion

	Value	*df*	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.935a	1	.09		
Continuity Correction[b]	1.675	1	.2		
Likelihood Ratio	4.883	1	.03		
Fisher's Exact Test				.11	.09

Note. Two cells (50.0%) have an expected count of less than 5. Due to this, referring to the Fisher's Exact Test was warranted. Statistical significance was not found for recidivism for the third year after completing juvenile drug court treatment for participants that received evidence-based treatment.

Table 4 illustrates a statistically significant result, $p < .001$. Rejecting the null hypothesis was warranted, indicating there is a statistically significant difference in recidivism rates amongst juvenile drug court participants that received evidence-based treatment within the first

year following completion of the drug court program. Table 5 illustrates a statistically significant result, $p = .01$ (one percent). It was determined that the null hypothesis was twice rejected, indicating a statistically significant difference in recidivism rates amongst juvenile drug court graduates that received evidence-based treatment within the second year after completing the drug court program. The results are determined as the results for years one and two following program completion are less than the set alpha value of $p < .05$ (five percent), represented in the respective Tables.

Table 6 does not illustrate a statistically significant result, $p = .09$ (nine percent). Failure to reject the null hypothesis was warranted for the third year following program completion. In this case, it was determined for the third year following program completion, the null hypothesis was accepted. It is essential to note in Table 6 that two cells (50%) had an expected count of less than 5. As the minimum expected count was 6.13, referring to the Fisher's Exact Probability Test in Table 6 was warranted (Kim, 2017). The potential rationale for the difference in expected frequencies could have been a result of fewer participants in the respective county of supervision, more or less appropriate mental health resources available in the area for offenders to receive, human error of criminal justice practitioners responsible for inputting recidivism information, or data instrument error during data collection. After a review of the Fisher's Exact Test, the result did not reach the set alpha level of significance; thus, failure to reject the null hypothesis at the $p < .05$ significance level was confirmed. For the third year following the drug court program's completion, no statistical significance was found between recidivism rates and evidence-based treatment received amongst graduates.

Various conclusions were made regarding the third year following program completion, as no statistical significance was found between recidivism and evidence-based treatment. First,

from reviewing the demographics, the highest number of graduates were age 17, totaling 32.3% of the total graduates. Three years following completion of the program, the graduates were between the ages of 20-21, resulting in different levels of mental maturity and comprehension of the law, which may have increased or decreased recidivism regardless of the type of treatment received during drug court programming. This assumption led to conducting the multiple linear regression in the study to extend a bit further.

According to the University of Rochester Medical Center (2022), the teen brain is not fully developed until age 25. They noted that the decision-making center (pre-frontal cortex) and emotion regulation (amygdala) part of the brain are still developing; therefore, may have resulted in more or less impulsive thinking and actions as the graduate grew and developed regardless of the treatment received. The second conclusion regarding a non-significant result for the third year following program completion was that an increased number of graduates completed drug court programming between 2015 and 2016 (N= 242) when compared to 2017 and 2018 (N=203). As mentioned, the juvenile drug court program underwent a program reconstruction in late 2017 that mandated the use of evidence-based practices, amongst other changes. Due to the higher end of graduates completing the program during the time period before the reform occurred, there may have been a lack of appropriate treatment provided; thus, increasing recidivism in the third year following completion of drug court.

The third assumption made from a non-significant result for the third year following program completion was the interference of the COVID-19 pandemic and how it may have impacted programming and recidivism. The first notable case of COVID-19 appeared in the United States in January 2020 (Centers for Disease Control and Prevention, 2022). When following graduates three years after program completion, 203 (approximately 46%) of graduates

had completed the program in 2017 and 2018, and three years later entered the years 2020 and 2021 when the pandemic peaked. Due to the stressors of the pandemic, isolation, unemployment, and lack of social service resources available, recidivism may have been impacted (Abrams et al., 2022). Further research on the impact of COVID-19 on recidivism is warranted to investigate this assumption further.

Assumption Testing for Multiple Linear Regression

Figure 2 represents a linear relationship between the dependent variable, recidivism, and the independent variables, age at graduation and whether the participants received evidence-based treatment. Northeastern University (2019) suggested that multiple linear regression requires that the errors between the observed and the predicted values should be normally distributed. This assumption was met by conducting a Kolmogorov-Smirnov Test of Normality. Table 7 illustrates that the variables were normally distributed.

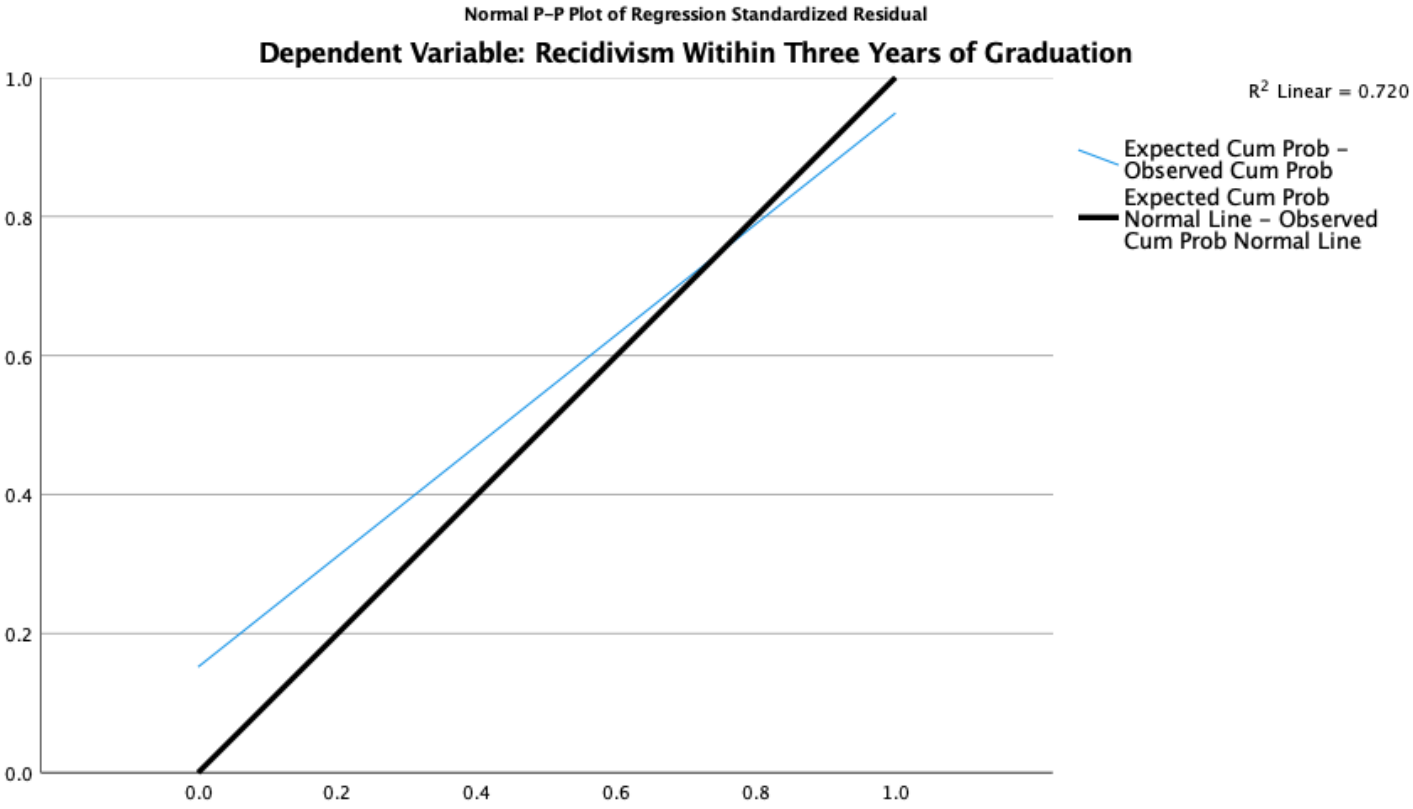
Additionally, multiple linear regression assumes that there is no multicollinearity in the data (Northeastern University, 2019). Penn State (2018d) suggested multicollinearity exists when two or more of the predictor variables are moderately or highly correlated with each other. Table 8 illustrates that the predictor variables, age at graduation, and whether the graduate received evidence-based treatment are not associated; thus, no multicollinearity or correlation exists between the independent variables. The absence of multicollinearity is also represented in Table 10 by referring to the variance inflation factor (VIF). A VIF of 1 means there is no correlation between the predictor variables (Penn State, 2018a). Finally, the last assumption of multiple linear regression is homoscedasticity, as noted by Penn State. Figure 3 illustrates a scatterplot of the variables. From the illustration, it was determined that the residuals were observed to have equal variance; thus, the assumption of homoscedasticity was met. Table 9 illustrates the

standardized residuals. Penn State (2018c) suggested standardized residuals quantify how large the residuals are to identify outliers feasibly. They noted that an observation outside -3, 3 is deemed an outlier. Within this study, there is an acceptable range of -2.52 to 1.24.

Boussiaia (2020) suggested Cook's distance (D_i) is the most representative measure of influence on overall fit as the test identifies any points in the data that negatively affect the multiple linear regression. Penn State (2018b) suggested that if Cook's distance is greater than.5, the data is worthy of further investigation, if it is less than .5, it may not be an influential variable. In the study, also represented in Table 9, the Cook's distance is $D_i = 0.06$.

Figure 2

Normal P-P Plot for Null Hypothesis 1



Note. Although there are some deviations, the majority of the data follows the line, thus indicating the linearity of the data.

Table 7

Test for Normal Distribution (Normality) for Null Hypothesis 1

	Age at Graduation	Kolmogorov-Smirnova		
		Statistic	*df*	Sig.
RecYN12	13	.	3	.
	14	.41	20	.00
	15	.39	56	.00
	16	.44	102	.00
	17	.52	144	.00
	18	.53	114	.00
	19	.41	6	.00

Note: The data is Normally Distributed at the p= <.001 significance level.

Table 8

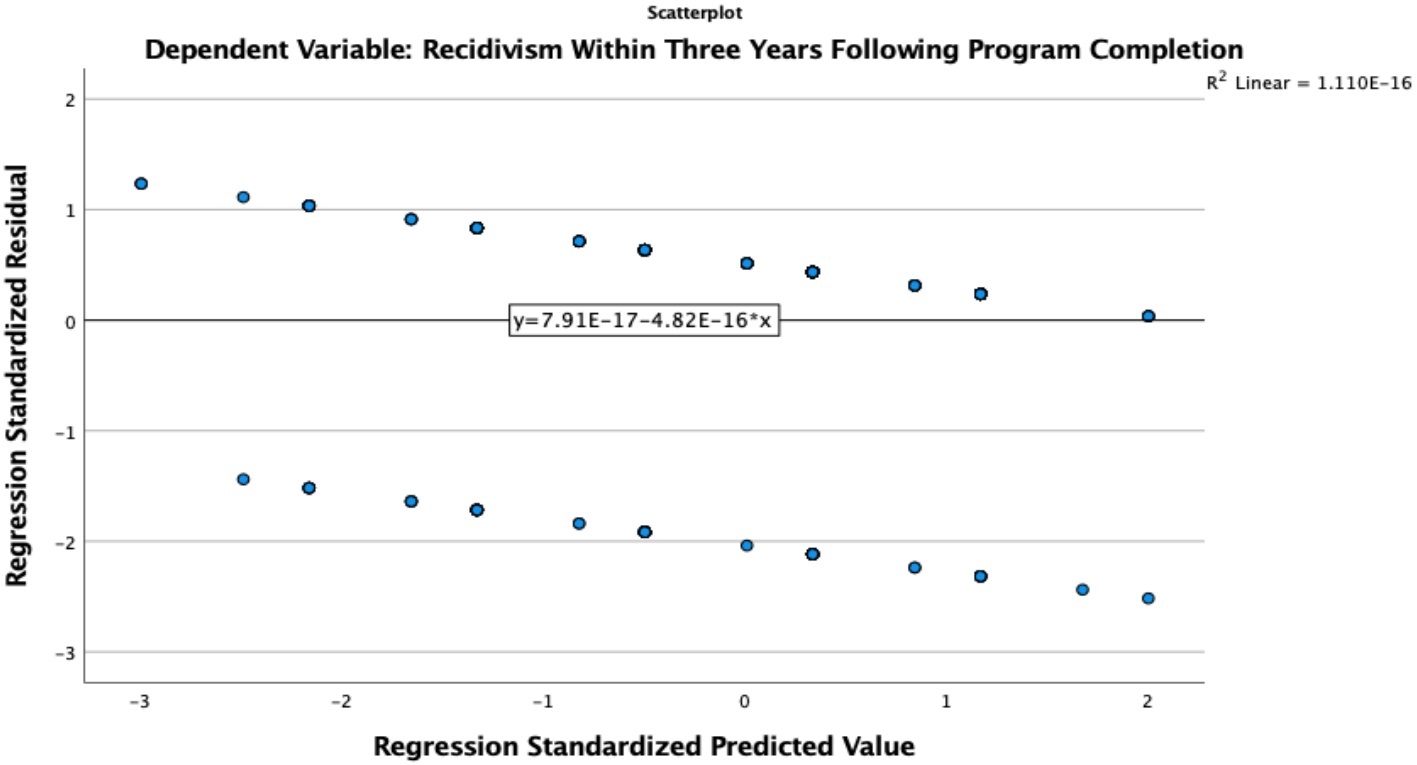
Correlations to Test for Multicollinearity

		Recidivism Within Three Years	Age at Graduation	Received Evidence-based Treatment
Pearson Correlation	Recidivism Within Three Years	1.00	.23	-.02
	Age at Graduation	.23	1.00	.00
	Received Evidence-Based Treatment	-.02	.00	1.00
N		445	445	445

Note: The Table illustrates no multicollinearity exists between the predictor variables, as there is no correlation detected. Also represented in Table 10 as the value of VIF = 1.

Figure 3

Scatterplot for Null Hypothesis 1 – Homoscedasticity



Note: Figure 3 illustrates the residuals were observed to have equal variance; thus, the assumption of homoscedasticity was met.

Table 9

Assumption Testing for Null Hypothesis 1: Residuals

	Minimum	Maximum	Mean	Std. Deviation	*N*
Predicted Value	1.52	2	1.8	.09	445
Std. Predicted Value	-3	2	.00	1.00	445
Standard Error of Predicted Value	.02	.07	.03	.01	445
Adjusted Predicted Value	1.5	2	1.8	.09	445
Residual	-.99	.48	.00	.39	445
Std. Residual	-2.52	1.24	.00	1	445
Stud. Residual	-2.53	1.25	.00	1.00	445
Deleted Residual	-1	.5	.00	.39	445
Stud. Deleted Residual	-2.55	1.25	-.00	1.00	445

Mahal. Distance	.21	13.15	2	2.86	445
Cook's Distance	.00	.06	.00	.01	445
Centered Leverage Value	.00	.03	.00	.01	445

Note. An observation outside -3, 3 is deemed an outlier (Penn State, 2018c). Within this study, there is an acceptable range of -2.52 to 1.24.

Multiple Linear Regression Analysis Results

Table 10 illustrates the multiple linear regression analysis that extended RQ1 to determine whether a juvenile drug court participant's age at the time of graduation and whether they received evidence-based treatment could predict future recidivism three years following completion of the juvenile drug court program. Collectively, a statistically significant result was found between the two independent variables (age and evidence-based treatment received) and the dependent variable (recidivism), $F (4, 442) = 12.78$, $p < .001$, explaining 55% ($R^2 = .55$) of the variance in the outcome variable. Age at the time of graduation ($B= .08$, $t=-5.03$, $p < .001$) contributed significantly to the model, while receiving evidence-based treatment ($B= -.03$, $t = -.51$, $p= .61$) did not. Table 11 illustrates the ANOVA table and how the sum of squares are distributed. This result was notable for further research regarding an offender's age at the time of juvenile drug court participation for the continued development of an age-appropriate treatment curriculum.

Table 10

Multiple Linear Regression Model with Recidivism as the Outcome Variable

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		*B*	Std. Error	Beta	*t*	Sig.	Tolerance	VIF
1	(Constant)	.53	.27		1.98	.05		
	Evidence-based treatment	-.03	.06	-.02	-.51	.61	1.000	1.000

Age at Graduation	.08	.02	.23	5.03	<.001	1.000	1.000

Note. For the multiple regression test, an alpha level was set at $p < 0.05$, in which age at graduation was statistically significant, $p < .001$.

Table 11

ANOVA table for Null Hypothesis 1

Model		Sum of Squares	*df*	Mean Square	*F*	Sig
1	Regression	3.92	2	1.96	12.78	<.001
	Residual	67.87	442	.15		
	Total	71.80	444			

Note: Dependent variable = Recidivism, Predictors (Constant) = Evidence-based treatment, and age at graduation.

Null Hypothesis 2

The second null hypothesis stated $H_0 2$: There is no statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following the program. For this hypothesis, a Chi-square of Independence test was conducted. Table 12 was produced to illustrate that all nineteen juvenile drug court programs were included in the Chi-square test and affirm the inclusion of all data in the dataset. For the purposes of anonymity, the specific sites of the juvenile drug court programs were not disclosed but rather distinguished by a unique identifier in the succeeding section. Table 12 illustrates the case summary for Null hypothesis 2. Upon review of the Table, it was determined that there were 445 participants separated by county or site of supervision, indicating no error in measurement or a data entry error.

Table 12

Case Summary for Null Hypothesis 2

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Re-arrested * County (Site) of Supervision	445	100%	0	0.0%	445	100%

Note. The Table illustrates all participant's included in the study when comparing recidivism rates by the site of supervision.

Table 13

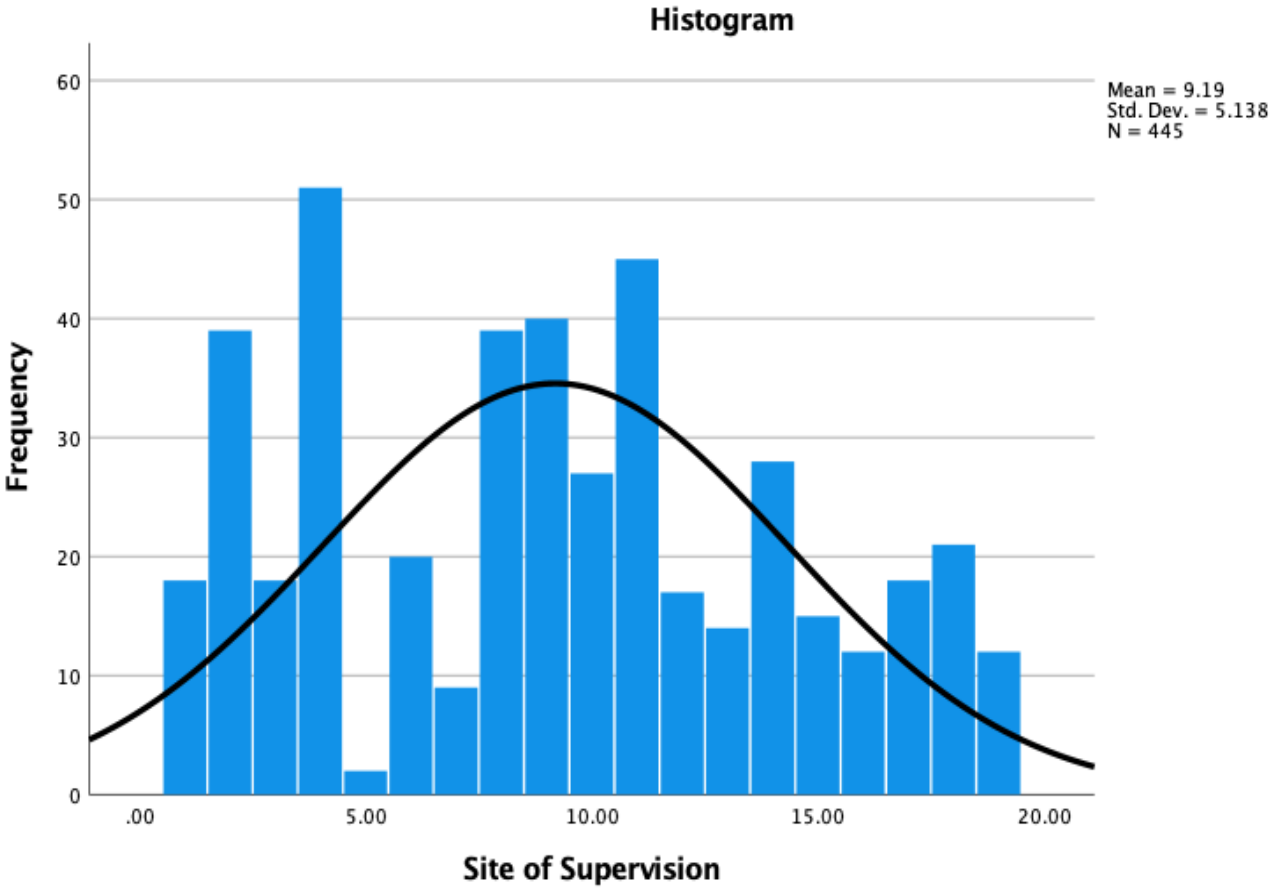
Skewness and Kurtosis Null Hypothesis 2

	N	Min	Max	Mean	Std. Dev.	Skewness		Kurtosis	
	Stat.	Stat.	Stat.	Stat.	Stat.	Stat.	Std. Error	Stat.	Std. Error
Site	445	1.0	19.0	9.19	5.14	.15	.12	-1	.23
Recidivism	445	1.00	2.0	1.80	.40	-1.5	.12	.21	.23
Valid N	445								

Note: Skewness of Site = .15, Kurtosis = -.1, Skewness for Recidivism = -1.5, Kurtosis .21. Both results indicated normally distributed data.

Figure 4

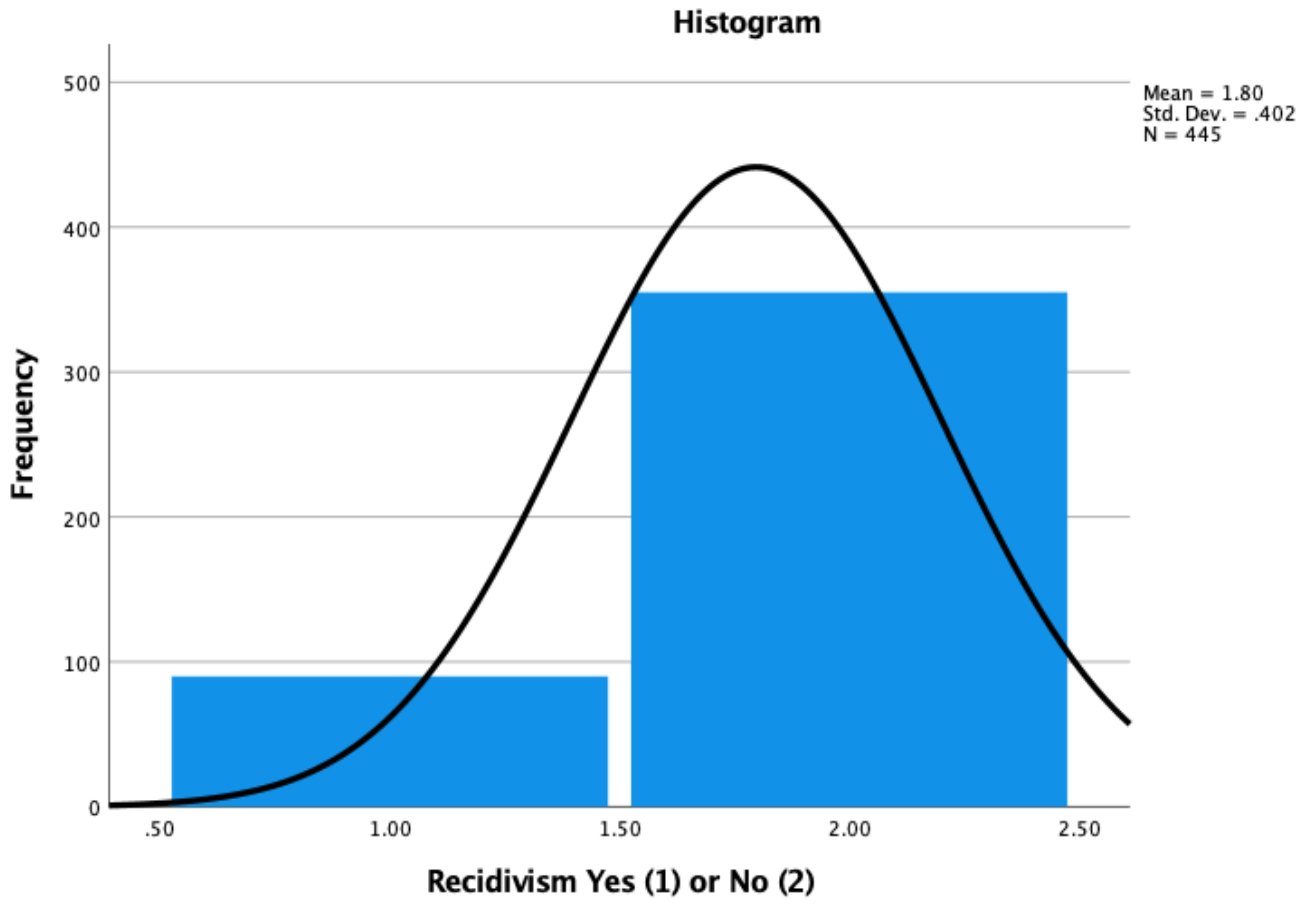
Histogram for Null Hypothesis 2 – Site



Note: Figure 4 illustrates a normal distribution for the 19 juvenile drug court sites.

Figure 5

Skewness Null Hypothesis 2 – Recidivism



Note: Figure 5 illustrates a normal distribution for recidivism rates of juvenile drug court graduates.

Assumption Testing

As stated in Null Hypothesis 1, the Chi-square test had specific assumptions that must be met, including data reported as frequencies, mutual exclusiveness of data points, each data subject can contribute data to only one cell, study groups are independent, two variables were measured, and the value of the expected outcome was five or more in at least 80% of the cells (McHugh, 2013). For the Chi-square test for Independence for Null Hypothesis 2, the data in the

cells were reported as frequencies indicating counts of cases of recidivism within each individual County of supervision, represented in Table 14. Additionally, categories were mutually exclusive, so each subject fit into only one category.

Table 14.

Frequencies for Null Hypothesis 2

	Site	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	4.0	4.0	4.0
	2	39	8.8	8.8	12.8
	3	18	4.0	4.0	16.9
	4	51	11.5	11.5	28.3
	5	2	.4	.4	28.8
	6	20	4.5	4.5	33.3
	7	9	2.0	2.0	35.3
	8	39	8.8	8.8	44.0
	9	40	9.0	9.0	53.0
	10	27	6.1	6.1	59.1
	11	45	10.1	10.1	69.2
	12	17	3.8	3.8	73.0
	13	14	3.1	3.1	76.2
	14	28	6.3	6.3	82.5
	15	15	3.4	3.4	85.8
	16	12	2.7	2.7	88.5
	17	18	4.0	4.0	92.6
	18	21	4.7	4.7	97.3
	19	12	2.7	2.7	100.0

Note. This Table illustrates the frequency of drug court graduates per site with juvenile drug court graduates for 2015, 2016, 2017, and 2018, N=445. Drug courts were provided a unique identifier to protect anonymity. Each site was provided a unique identifier of 1-19 to differentiate into separate programs.

Chi-square Test Results

Table 15 illustrates the Chi-square test, where the results were statistically significant, indicating that the results are not attributed by chance or by random (The University of

Kentucky, 2022). Based on the outcome, rejecting the null hypothesis was warranted as there was a definite, consequential relationship between the specific site where the offender participated in juvenile drug court and the recidivism rate amongst graduates. A notable limitation to this result was that 13 cells had expected counts less than five. The expected count could have decreased due to the practitioners at the specific site neglecting to enter accurate data regarding re-offenses or misunderstanding how to report recidivism data in the database appropriately. Additionally, data could have been erroneous or misleading due to poor auditing of the database responsible for ensuring data accuracy. Nonetheless. the result was statistically significant, and rejecting the null hypothesis was warranted.

Table 15

Chi-Square Test for Null Hypothesis 2.

	Value	*df*	Asymptotic Significance (2-sided)
Pearson Chi-Square	42.858a	18	< .000
Likelihood Ratio	43.827	18	< .000
N of Valid Cases	445		

Note. 13 cells (34.2%) have an expected count of less than 5. The minimum expected count is .40.

Null Hypothesis 3

The third null hypothesis stated $H_0$3: There is no difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018. As mentioned, in late 2017, the juvenile drug court program underwent significant reform. Before this reform, treatment resources were scarce and not uniform throughout the state studied. Table 16. illustrates the number of juvenile drug court graduates per year and the number of graduates that reoffended within each year's cohort.

An analysis of the percentage of recidivism rates within three years following program completion was conducted. Figure 6 illustrates the percentage of graduates that reoffended for each year on a bar chart. The Office for National Statistics (2021) suggested bar charts should be used when there are less than six categories and to illustrate part-to-whole relationships. The results were as follows: 2015 = 25% recidivism, 2016 = 19.42%, 2017= 14.95%, and 2018, 22.12% out of the total number of graduates per year. Rejecting null hypothesis 3 was warranted as there was a fluctuation in the percentage of recidivism between the years studied. The percent change was calculated by taking the difference between the initial value and the end value, dividing it by the initial rate, and then multiplying by 100 to convert it to a percent (NIH, n.d.). Between 2015-2016, there was a 5.8% decrease in recidivism; between 2016-2017, a 4.47% decrease; and between 2017-2018, there was a 7.17% increase in recidivism among juvenile drug court graduates three years following program completion.

Table 16

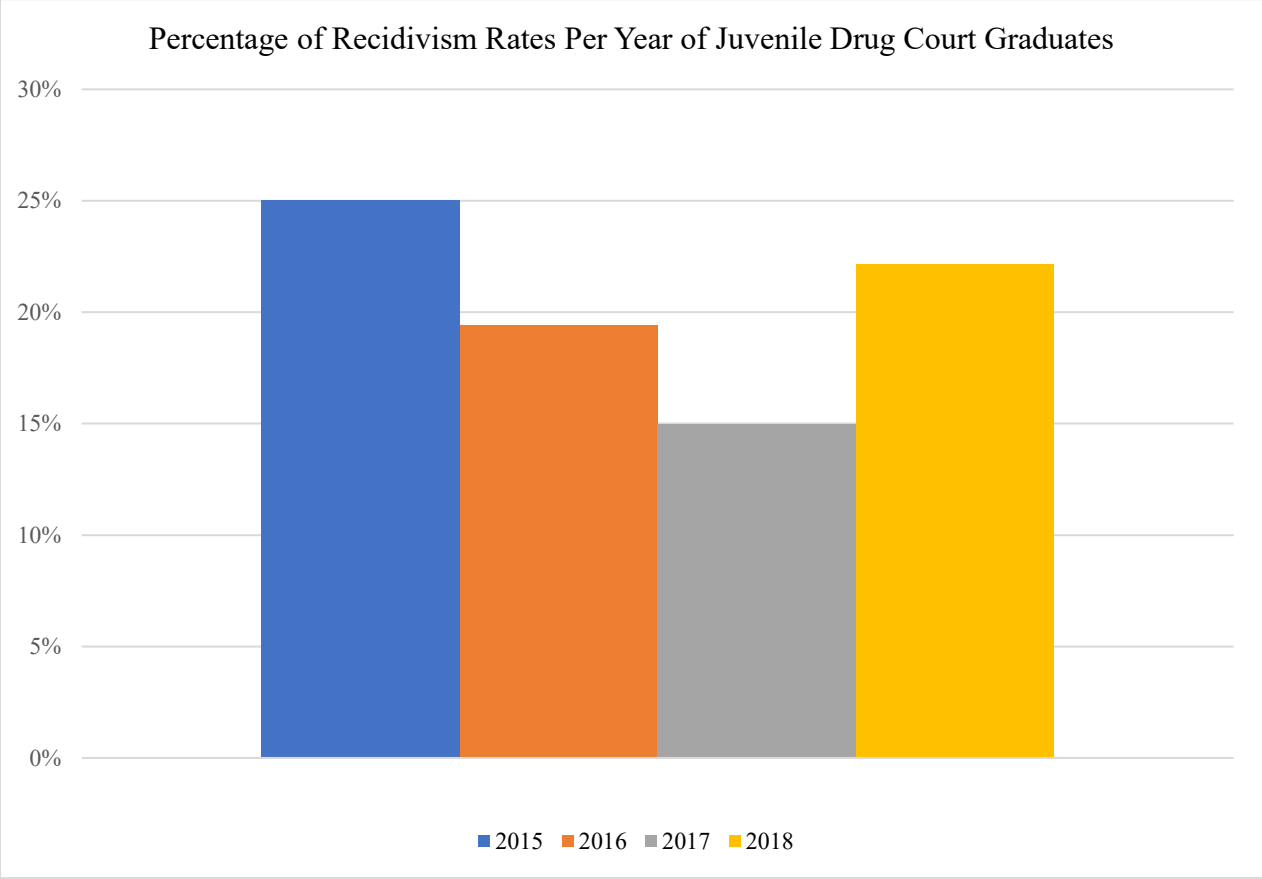
Total Number of Juvenile Drug Court Graduates Per Year

		Re-offended		
		No	Yes	Total
Graduation Year	2015	78	26	104
	2016	112	27	139
	2017	91	16	107
	2018	74	21	95
Total		355	90	445

Note. The Table represents the total number of juvenile drug court graduates of juvenile drug court per year.

Figure 6

Percentage of Recidivism Rates of Juvenile Drug Court Graduates for Null Hypothesis 3



Note. Figure 6 illustrates the percentage of recidivism rates per year within three years of graduation from the juvenile drug court program.

Summary

Chapter Four provided a summary of the data collected. Additionally, the specific data analysis tools, such as the Chi-square of Independence and multiple linear regression, and their assumptions were discussed. The descriptive statistics of the dataset were reported. The analyses revealed a statistically significant change in recidivism rates amongst juvenile drug court graduates that received treatment utilizing evidence-based practices three years following program completion collectively. However, when the Chi-square was run separately between

one, two-, and three years following program completion, the third year following graduation was not statistically significant. Null Hypothesis 1 was rejected as there was a statistically significant change found in recidivism rates cumulatively based on receiving evidence-based treatment three years after graduation from the juvenile drug court program.

A notable result was found when the multiple linear regression revealed a significant difference between juvenile drug court graduates that received evidence-based treatment based on age within three years following program completion; therefore, further research on how age may impact recidivism of adolescent drug court participants is warranted to potentially reform the specific evidence-based treatment strategies used. Null Hypothesis 2 was rejected as the Chi-Square test of Independence found a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen separate juvenile drug court sites across the state within three years following program completion. It is important to note that for Null Hypothesis 2, many sites did not have high recidivism rates; thus, the analyses could only be run on the counties where recidivism was present.

Null hypothesis 3 was rejected as there were distinct differences in recidivism rates discovered among juvenile drug court graduates three years following program completion. Based on the results of the comprehensive study, a significant factor of recidivism rates amongst juvenile drug court graduates was the age at the time of graduation, availability of appropriate treatment, and where the offender participated in programming within the state under consideration. It was determined that the reconstruction of the juvenile drug court program throughout the state had a positive impact on the reduction of recidivism throughout the state due to the decrease in recidivism as the study years progressed. Although recidivism increased from 2017 to 2018, it was determined that extenuating circumstances, such as the COVID-19

pandemic, may have caused delays in drug court treatment; thus, influencing the increase of recidivism rates among the graduates that fell within the study year parameters.

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five contains an extensive discussion of the final results of the study. A discussion of the study's limitations and recommendations for future research are delineated within the chapter. The recommendations listed would amplify further investigation into juvenile recidivism within the state studied that could be replicated nationwide. The study's implications are also discussed, highlighting specific suggestions for future policy and practice concerning treatment strategies used throughout juvenile drug court treatment programming. Throughout the Chapter, the term statistical significance is discussed. As mentioned in the preceding Chapter, statistical significance is a measure of the probability of the null hypothesis being true (Abdelgawad & Tenny, 2022). It is essential to note the results herein are not 100% certain such that an acceptable level of significance was determined at an alpha level of $p < .05$ (5%). The goal of the research conducted intended to be correct 95% of the time and incorrect only 5%, if applicable.

Discussion

This study aimed to explore recidivism rates amongst juvenile drug court graduates from 2015, 2016, 2017, and 2018. The study sought to follow recidivism rates of graduates three years following completion of the drug court program to determine if the juvenile drug court program was effective in reducing recidivism amongst graduates for those that received appropriate treatment interventions during their programming, referred to as evidence-based treatment strategies. The study examined the various ages of juvenile drug court graduates between the ages of 13 and 17 to investigate if the age of participants at the time of graduation impacted recidivism rates three years following program completion. Additionally, the study aimed to

determine if the location of juvenile drug court programs throughout the state studied was influential regarding recidivism. Finally, the program's overall effectiveness was determined by reviewing the percentage of recidivism rates among juvenile drug court graduates three years after completion of the program. The following research questions guided the study:

RQ1: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion?*

RQ2: *Is there a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion?*

RQ3: *Is there a difference in the percentage of recidivism rates amongst juvenile court graduates three years following completion of the program between 2015, 2016, 2017, and 2018?*

Null Hypothesis 1

$H_0 1$ was as follows: There is no statistically significant change in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion. The Chi-square Test of Independence results indicated a statistically significant difference between recidivism rates between individuals who received evidence-based treatment and those that did not, $p = < .001$. Since a statistically significant impact was found, rejecting the null hypothesis was warranted. After the Chi-square test was conducted on all years collectively, a Chi-square test of Independence was conducted individually on each year following the completion of the drug court program. For the first year following drug court graduation, recidivism was statistically significant for graduates

that received evidence-based treatment, $p < .001$. This result indicated that the relationship between evidence-based treatment and recidivism was not due to chance, and the type of treatment influenced overall recidivism rates for the first year following program completion. Additionally, the second year following drug court completion indicated statistically significant results, $p < .01$.

A final chi-square analysis was conducted in the third year following drug court completion. A statistically significant result was not found, $p = .09$; thus, indicating no effect was observed (Grabowski, 2016). While there was not a statistically significant finding for the third year following juvenile drug court completion, the data did reveal a significant result for all three years collectively; thus, indicating that the use of evidence-based treatment influenced the likelihood of recidivism for the juvenile drug court graduates. Previous studies found higher recidivism rates in juvenile and adult offenders within three years. (Indiana Department of Corrections, 2020; United States Sentencing Commission, 2019). Conclusions drawn regarding the non-significant result for the third year following completion of the juvenile drug court program included the offender's age at the time they received treatment, the impact of the drug court reform throughout the state that occurred in late 2017, and the impact the COVID-19 pandemic may have had on recidivism and program effectiveness.

Various studies have investigated an offender's age at the time of their first offense; however, several studies have neglected to explore the offender's age and the potential relationship that exists between receptiveness to the treatment due to mental maturity (Sivertsson, 2018; Pan et al., 2021; D'Amico et al., 2013). The non-significant result for the third year following program completion may have occurred due to the graduates having various levels of receptiveness to the treatment the program offered, maturation, or mental ability to

understand the treatment strategies provided to them. Secondly, the juvenile drug court program underwent reform in late 2017 that mandated uniformity across the state's nineteen juvenile drug court sites. Years 2015 and 2016 had a higher number of graduates than 2017 and 2018; therefore, it was inferred the graduates that participated before the amendment period did not receive appropriate treatment; thus, impacting recidivism for that specific time frame.

The third and final conclusion drawn from the non-significant result was the potential impact of the COVID-19 pandemic on recidivism. Approximately 200 graduates fell within the time frame that the COVID-19 pandemic began in 2020. It was determined that the pandemic may have impacted recidivism regardless of the type of treatment due to the vulnerability of offenders experiencing mental health and substance use concerns (Hewson et al., 2020). Additionally, due to the pandemic, resources may have been scarce, and delayed follow-up from practitioners may have impacted recidivism rates further. In addition to the Chi-square test, a multiple linear regression was conducted to add age as a predictor variable. The results of the multiple linear regression adhered to statistically significant results, $p <. 001$. As there was a statistically significant result found, rejecting the null hypothesis was warranted. The research revealed statistical significance between juvenile drug court graduates that received evidence-based treatment based on age three years following program completion, indicating the results were not due to chance (Abdelgawad & Tenny, 2021). This result was essential to the study as age at the time of treatment is not commonly studied.

Null Hypothesis 2

$H_0 2$ was as follows: There is no statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion. A Chi-square test of Independence was conducted.

Results adhered to a statistically significant effect; thus, rejecting the null hypothesis was warranted. It is important to note that some sites did not experience recidivism amongst graduates; therefore, the result is only represented based on jurisdictions where recidivism occurred. An important conclusion drawn from this result was that the absence of uniformity of evidence-based treatment across the various sites before the reform could have impacted recidivism among juvenile drug court graduates. Additionally, the availability of mental health resources in each area and their participation or collaboration with the drug court program may have played a role in recidivism rates. The critical takeaway from the result is the importance of developing uniform treatment provided to all participants to better gauge the overall effectiveness of the drug court program in future years.

Null Hypothesis 3

$H_0$3 was as follows: There is no difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018. The purpose of this addition to the study was to investigate if recidivism rates were higher or lower when compared to other years within the study parameters. The results indicated 25% recidivism in 2015, 19.42% in 2016, 14.95% in 2017, and 22.12% in 2018. The null hypothesis was rejected as based on the percentages, a fluctuation in recidivism was confirmed. Further, this result indicated higher levels of recidivism during 2015 and 2016 than in 2017 and 2018. This finding was essential to the study to make assumptions on factors influencing recidivism. As mentioned, in late 2017, the juvenile drug court program was reconstructed to meet the Juvenile Drug Court Guidelines established by the United States Department of Justice (2016). Specifically, the mandate of using evidence-based practices was emphasized, as noted by the United States Department of Justice. It was determined that the

COVID-19 pandemic, reconstruction of the program when appropriate treatment was mandated, and the availability of mental health resources depending on where the offender received treatment influenced recidivism.

Implications

This study provided information on the effectiveness of juvenile drug courts currently operating within a state in the Southeastern United States. The study had significant findings regarding the use of evidence-based practices, age, and location to determine the effectiveness of the juvenile drug court program. The study highlighted that although juvenile drug court participants may have received evidence-based treatment, depending on their ability to acknowledge the treatment provided and whether they possess the mental capacity to process the therapeutic interventions available, recidivism was impacted. The study added to the existing literature on recidivism; however, it added a variable that is often looked over. Many studies observe recidivism by race, peer deviancy, criminal history, type of offense, geographical environment, or gender (Holloway et al., 2022). Previous studies have observed age; however, in the context of an offender's age at the first offense as a predictor of future recidivism as opposed to the offender's age when they received judicial or therapeutic intervention/treatment (Lopez, 2018). Therefore, considering an offender's age was essential to this study.

The study findings revealed various implications for future policy and practice. Due to the noteworthy results regarding the use of evidence-based treatment with recidivism, juvenile justice practitioners should continue to expand the use of evidence-based treatment to ensure youth's specific and individualized needs are addressed appropriately during participation in juvenile drug courts. Subsequent investigation into the particular curriculum used during treatment and whether equal treatment resources are available throughout the state may reveal

the need for developing affordable, uniform treatment strategies to serve youth offenders best. Once uniform treatment strategies are implemented, practitioners could replicate the study to gauge the effectiveness of individual treatment instruments to add, remove, or expand where applicable. A notable finding in the study revealed age as a factor regarding recidivism and the use of evidence-based treatment. Due to the various potential causes of age being a factor, such as the ability to comprehend treatment, level of mental maturity, or unsupportive or non-existing familial support systems, later research should be conducted on age-appropriate resources that provide more relative treatment to participants opposed to participants receiving the same treatment in a large cohort setting (McCollister et al., 2018).

Research should not only focus on family-oriented strategies but also address alternate interventions for youth involved in the child-welfare system without familial support. The study revealed that drug courts are effective in reducing recidivism. However, from 2017 to 2018, there was a slight increase in recidivism, although still lower than in years prior. Factors such as the COVID-19 pandemic could have significantly influenced recidivism. Future policy changes could involve developing feasibly accessible, evidence-based, age-appropriate curricula that support autonomous participation in treatment if a similar pandemic occurs. The study added to the existing literature regarding recidivism rates, as before the study, there was no research conducted on the recidivism rates of juvenile drug court participants. Additionally, there was no existing literature within the state department regarding how the use of community-based diversion programs, as opposed to traditional incarceration, influences future criminal behavior amongst youth as they develop and enter adulthood. The study findings were essential to future policy reform, practice, and subsequent research on the effectiveness of the therapeutic jurisprudence approach to adolescent crime. Furthermore, the study findings suggest the

importance of juvenile drug court model adherence to address the individualized needs of juvenile offenders who experience substance use concerns.

Limitations

The first limitation of this research study was the sample size of the study subjects. Although the study accounted for a complete enumeration of the graduates from 2015, 2016, 2017, and 2018, 445 graduates may be a smaller sample size when compared to other, larger states throughout the United States that have increased juvenile justice presence. Although this limitation may decrease generalizability compared to larger states, the study revealed notable results for the state studied, as no previous studies were conducted, and nationwide statistics on juvenile recidivism are unavailable. Additionally, the study can be feasibly replicated for future researchers. The second limitation included the lack of available data, and data retrieval became relatively strenuous as the organization was overwhelmed with regular work tasks. Therefore, the agency provided the raw data that was thoroughly cleaned and organized by this researcher to uncover the data needed for the study.

The study initially aimed to explore additional variables such as participants' education and employment status during programming that may have resulted in less attention given to the drug court program; thus, resulting in recidivism. However, there was not enough viable data to pursue statistical analyses. The third limitation was a lack of previously conducted studies on recidivism for the location under consideration to add a comparison from years before the study year parameters. Although there is abundant research on recidivism, not many studies examine the uniformity of services throughout the individual jurisdictions throughout a region or age as a variable. The final limitation is the data provided by the agency that was organized was from a state-wide database where data could have been incomplete or missing if probation officers and

other juvenile justice practitioners neglected to enter data. The study results are based solely on the data reported for the study subjects exported directly from the state agency.

Recommendations for Future Research

Continued research on the effectiveness of the therapeutic jurisprudence approach regarding juvenile offenders is crucial to reduce the likelihood of hindering the development of adolescent individuals that find themselves working through the juvenile justice system. It is paramount to improve data collection within local agencies to improve data on a national scale (Office of Juvenile Justice and Delinquency Prevention, 2020b). Replicated studies of recidivism rates as the years progress would provide important information on how the juvenile drug court programs are actively reducing the number of offenders returning to the justice system; thus, interventions can be altered, removed, or expanded, where necessary. As mentioned, according to the Office of Juvenile Justice and Delinquency Prevention (2020b), national recidivism rates for juveniles are not available. As national recidivism rates are not collectively tracked, potential research opportunities on the effectiveness of community-based treatment programs such as juvenile drug courts are hindered. Based on the findings, additional research is recommended to further the literature on the effectiveness of juvenile drug court programs nationwide. This section will delineate this writer's recommendations for future research regarding the effectiveness of juvenile justice programs.

Further Recidivism Studies

Future researchers should conduct a nationwide study on recidivism amongst juvenile offenders within three years. A recommended study could be completed by individual states or local governments within the state collecting and reporting pertinent recidivism data to state administrative agencies; thus, statistical analyses could be conducted to determine the

effectiveness of community-based programs nationwide. Results from a study such as this would be essential to implement new policies and change practices within the judiciary by purging strategies that have been proven ineffective, such as specific treatment curricula and unsuccessful incentives and sanctions. Various factors could be considered regarding recidivism, such as education and employment status, socioeconomic status, peer relationships, and other environmental factors.

The National Institute of Justice (n.d.) reported recidivism is often measured by any transgression of the law that resulted in rearrest, reconviction, or return to a specific program within the justice system with or without a new sentence during a period of three years following the offender's release. The author noted recidivism is essential when considering general criminal justice topics such as incapacitation, specific deterrence, and rehabilitation. Regarding incapacitation, the development of community-based intensive supervision programs permits juvenile offenders to remain in their communities, where they must learn to subsist within their environment rather than being removed from their homes and community (Krisberg et al., 1994). Future research would be advantageous on the impact of sentencing youth to community-based programs instead of confinement to artificially controlled settings where programs focus more on removing offenders from their home environment rather than changing their behavior and attitudes.

The Wisconsin Criminal Justice Coordinating Council (CJCC) (2015) reported recidivism is often measured for adults from 6 months, one year, two years, three years, and five years (or longer) following release. Further investigation into how juvenile drug courts impact specific deterrence from offenders committing a future crime once they complete the program would assist juvenile drug court practitioners in developing appropriate curriculums to meet

offender needs. Continued research into treatment strategies would enhance the rehabilitation practices of juvenile drug courts, thus, better repairing the individual to lead to a healthy, law-abiding lifestyle once appropriate treatment strategies were identified (Krisberg et al., 1994).

Alternate Factors Leading to Recidivism.

Future researchers should investigate further into how age may influence future recidivism regarding the specific type of evidence-based treatment/curriculum received during participation in juvenile drug court. Various studies have viewed age as a factor; however, they had investigated how an offender's age at the first offense may have impacted recidivism as the offender matured, rather than what age they were when they received a specific level of treatment (Point Park University, 2023). As mentioned previously, national juvenile recidivism figures are unavailable; thus, it is difficult to gauge the factors influencing offenders to return to the justice system once they complete a court-mandated sentence. It is possible the practices within the juvenile drug court curriculum itself are not effectively meeting the needs of offenders, thus, resulting in offenders returning to criminal behavior as their criminogenic needs were not addressed during programming. Continued research is needed to investigate this further.

Receptiveness to Treatment

Many juvenile offenders that enter the juvenile justice system have an existing mental health condition (Point Park University, 2021). Researchers should further investigate how likely offenders are to accept and participate in the treatment juvenile drug courts offer due to their ability to comprehend the curriculum provided to them. McKay and Brumback (1980) reported learning disabilities have been associated with juvenile delinquency. The authors suggested that professionals working with juvenile offenders must be aware of how learning deficits may impact delinquency, and programs that are realistic to meet the needs of youth offenders must be

established to deter future criminality. Thus, continued research on interventions that assist juveniles in becoming valuable, productive members of society is crucial, as noted by the authors.

Additional factors influencing the likelihood of participation or receptiveness to treatment may include potential co-occurring disorders, familial strain, addiction, or other mental health concerns. Collaborating with juvenile justice practitioners to ensure appropriate curriculums are developed and implemented is paramount. If left untreated, juvenile mental health concerns can amplify, resulting in poor outcomes and a return to the justice system. To rectify this concern, many jurisdictions have focused on family therapy, aggression replacement training, providing supportive role models, and targeting delinquency by getting the offender's family involved (Point Park, University). However, if familial strain exists, offenders may not be as likely to engage or be as receptive to therapy with the family in which they may have existing trauma. Watkins et al. (2020) suggested various family therapies have been designed to address family strain for justice-involved youth. The National Juvenile Defender Center (2013) presented that family participation in treatment offered to youth creates an inclusive environment to ensure the best outcome for the youth.

A significant problem is that many juvenile offenders are involved with the juvenile justice system due to delinquent behavior and the child welfare system due to maltreatment within the family, referred to as dually involved youth (Office of Juvenile Justice and Delinquency Prevention, 2021). A considerable concern is that interventions specifically designed to target youth working through the juvenile and child welfare systems are limited, thus, introducing additional challenges for juvenile justice practitioners to combat to attempt to lower recidivism. Further research is needed to discover appropriate interventions for youth that

do not have family support so that they may be more receptive to inventions provided to them, as opposed to attempting to mend strenuous familial relationships.

Uniform Treatment

Collaboration with resources available in the community is needed to rehabilitate offenders successfully. Thus, community-based diversion programs, such as juvenile drug courts, heavily rely on the resources available within the community. Researchers should continue to study and develop uniform and equally accessible curriculums to best assist juvenile offenders in the rehabilitation process by assessing the individualized criminogenic needs of offenders in their respective areas. Based on the study's results, the site of supervision adhered to significant results, indicating a potential discrepancy in treatment available to juvenile drug court participants due to the availability of mental health resources within the community. Continued research on treatment resources could result in a feasible, accessible curriculum, such as online treatment strategies that may assist in ensuring the equality of resources nationwide.

Based on the study findings, it is recommended for criminal justice practitioners working within the justice system in the state studied to review the study findings and collaborate with data analysis personnel and other organizations responsible for tracking crime trends to ensure effective interventions are implemented to continue reducing recidivism rates amongst youth as they enter adulthood. It would be beneficial to develop a collaboration between the researchers and mental health personnel to proactively determine effective treatment based on recidivism rates and individual mental health and substance use needs of offenders. The Office of Juvenile Justice and Delinquency Prevention (2020b) reported juveniles encounter significant challenges when they return to their communities without judicial supervision resulting in reoffending. The author noted many jurisdictions lack the data infrastructure to effectively investigate constructive

information regarding improving community reentry practices. As a result, multiple agencies assisting youth in transitioning back into society use various strategies and do not share information between them, as noted by the author.

Recidivism After the Pandemic

Researchers should conduct studies in the upcoming years to investigate recidivism rates amongst juvenile offenders who participated in juvenile drug courts during the COVID-19 pandemic. The Council of Juvenile Justice Administrators (2022) reported that the COVID-19 pandemic significantly impacted individuals as well as private, state, and global organizations. As many stakeholders had never been involved in a pandemic, they were very underprepared for the upcoming challenges the juvenile justice system would face, as noted by the author. The author reported that specific challenges these organizations faced included providing meaningful support for families, timely information for stakeholders and the public, managing staff members' stress, often resulting in staff resistance, attempting to continue essential programs and services, and other controversies within the various government organizations. Looking ahead, the noted challenges amplify the need for further investigation of recidivism among juvenile drug court participants to expand proper resources so jurisdictions can proactively implement a plan of action if a similar occurrence happens.

Summary

This quantitative quasi-experimental longitudinal study intended to explore the overall effectiveness of juvenile drug courts through the lens of therapeutic jurisprudence. Additionally, the study aimed to investigate the usefulness of evidence-based treatment strategies to determine if this treatment approach effectively reduced recidivism. To discover the effectiveness of the drug court program, this writer examined recidivism rates amongst juvenile drug court graduates

from 2015, 2016, 2017, and 2018 in which recidivism was tracked three years following completion of the program to discover if the program was influential in decreasing recidivism. Additionally, factors such as an offender's age, the location of treatment, and the type of treatment received during programming were examined. Finally, the overall percentages of recidivism per year were dissected and treated as a comparison to make predictions, assumptions, and recommendations for future research into juvenile drug court effectiveness regarding the recidivism of youth offenders as they enter adulthood.

Three research questions guided this study: Is there a statistically significant difference in recidivism rates amongst juvenile drug court participants that received treatment utilizing evidence-based practices three years following program completion? Is there a statistically significant difference in recidivism rates amongst juvenile drug court graduates across nineteen different juvenile drug court sites within three years following program completion? Is there a difference in the percentage of recidivism rates amongst juvenile drug court graduates three years following completion of the program between 2015, 2016, 2017, and 2018? There was a significant gap in the literature regarding the recidivism rates of juvenile offenders. Therefore, the study aimed to highlight potential factors that may influence youth to return to the justice system once they complete the juvenile drug court treatment program. The first research question targeted the type of treatment involved in the drug court program. The second research question aimed to investigate deeper into the kind of treatment offered based on location throughout the state. The third research question sought to provide actual figures regarding recidivism rates to illustrate the program's effectiveness in recidivism.

The present study revealed that the use of evidence-based treatment was influential in reducing recidivism amongst juvenile drug court graduates for the first- and second years

following completion of the drug court program. A compelling finding in the third year following graduation was there was no effect observed between the use of evidence-based treatment and recidivism for the third year following graduation. A finding such as this was notable as several factors may have influenced this result, such as practitioner error in reporting re-offenses of graduates, inaccuracies in the data, or there was simply no relationship between the rate of reoffending and type of treatment received for that third year. Additional research is needed to determine if factors such as the COVID-19 pandemic may have influenced recidivism in that third year, as just under half of the overall graduates fell within the beginning of when the pandemic began. As courts were shut down and juvenile justice organizations struggled to withstand providing treatment to offenders, it is possible recidivism rates for the third year following graduation were impacted.

The study also found that the location of treatment throughout the state influenced recidivism. This finding is important as in late 2017 and early 2018, the juvenile drug court program was reconstructed to ensure that the program acted in accordance with the 16 Principles of Juvenile Drug Court established by the federal government. The reform that occurred mandated the use of evidence-based practices during treatment. Further research is necessary to address the specific types of curricula offered throughout the program before and after the program reform to best gauge if equal resources were available to meet offender needs. As stated throughout this discourse, community-based programs heavily rely on the resources available in the surrounding area within the juvenile drug court's jurisdiction. Although there are 19 juvenile drug court programs operating throughout the state studied, specific juvenile drug courts handle cases between two to four counties combined. Additionally, offenders can be transferred to other locations if they relocate.

Location of treatment was a pronounced finding as it heightened the need for juvenile justice and mental health practitioners to collaborate and create equal, easily accessible, and affordable treatment interventions. It also supplements further research into the specific treatment strategies used during treatment to reinforce the need to consider researchers in the curriculum-making process. Collaboration between researchers, mental health practitioners, juvenile justice practitioners, and stakeholders directly involved in the rehabilitation of youth would assist in creating the most effective treatment interventions possible to best assist them in reintegrating back into society without court supervision following completion of the program. Additionally, as the study revealed age as a factor, collaboration with researchers would assist in developing age-appropriate curricula that can be feasibly integrated into all programs throughout the state. Developing uniform, affordable, feasibly accessible, and age-appropriate treatment strategies would relieve these extraneous factors if a similar research study were conducted in the future.

Finally, the study revealed an overall reduction in recidivism. Various studies have been conducted in other states or localities; however, to this writer's knowledge, no studies exist that mock the strategies used in the present study. In the state studied, the juvenile drug court program effectively reduced recidivism as the percentages declined from 25% in 2015 to 19.42% in 2016. Then, it decreased to 14.95% in 2017. Although recidivism increased to 22.12% in 2018, this number is lower than the initial 25% recidivism rate in 2015, thus, indicating an overall decrease in recidivism from the start of the study year parameters. Several factors could have resulted in the increase in 2018; however, the most notable was that three years following 2018, graduates fell within the program reform and the COVID-19 pandemic, where treatment practitioners struggled to meet the treatment needs of youth and their families. Stakeholders

responsible for policy reform can benefit from this study to ensure appropriate treatment strategies are implemented to reduce recidivism among juvenile offenders who participate in juvenile drug courts.

APPENDIX: IRB Approval Letter

From: do-not-reply@cayuse.com
Sent: Thursday, October 13th, 2022 3:27 PM
To: Sharp, Christopher (Helms School of Government) <[redacted]>; Watkins, Mallory NoElle <[redacted]>
Subject: [External] IRB-FY22-23-412 - Initial: Non-Human Subjects Research

October 13, 2022

Mallory Watkins
Christopher Sharp

Re: IRB Application - IRB-FY22-23-412 The Impact of Juvenile Drug Court on Recidivism

Dear Mallory Watkins and Christopher Sharp,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds that your study does not meet the definition of human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research because it will not involve the collection of identifiable, private information from or about living individuals (45 CFR 46.102).

Please note that this decision only applies to your current application. Any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

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