AN EXAMINATION OF THE RELATIONSHIPS BETWEEN EXPOSURE TO VIOLENCE, PSYCHOPATHIC DEVIANCE, AND RECIDIVISM AMONG JUVENILE OFFENDERS

by

ASHLEY L. PIEGORE

(Under the Direction of Georgia B. Calhoun)

ABSTRACT

The purpose of this prospective study was to investigate the predictive capabilities of the Psychopathic Deviate scale on the Minnesota Multiphasic Personality Instrument – Adolescent version (MMPI-A) and the Exposure to Violence subscale on the Juvenile Offender Parent/Guardian Questionnaire (JOPGQ) in determining severity of recidivism among juvenile offenders. After stringent screening procedures, 207 male and female adjudicated youth were included in the sample. Each participant and their guardian completed an intake with a doctoral student in the Juvenile Counseling and Assessment Program (JCAP). As a part of the intake, each adolescent participant took the MMPI-A, and each guardian completed the JOPGQ. Juvenile offense histories including number and types of offenses were examined using the Juvenile Tracking System. Results indicated that the Psychopathic Deviate scale and four of the Harris Lingoes subscales which comprise the clinical scale successfully predicted severity of recidivism among

juvenile offenders. Further discussion of the research findings, implications, and suggestions for future research are discussed.

INDEX WORDS: Adverse Childhood Experiences, Adjudicated Youth, Adjudication, Antisocial Personality Disorder, Conduct Disorder, Criminal Behavior, Delinquency, Oppositional Defiant Disorder, Psychopathy, Recidivism, Risk Assessment Instrument, Status Offense, Trauma, Post-traumatic Stress Disorder, Truancy

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DEDICATION

This work is dedicated to my most cherished canine companion, Tuxedo. Tux has offered me unrelenting support and provided me with incomparable motivation to pursue my dreams and accomplish my goals. I am driven by the desire to make Tux proud. His unwavering love has afforded me comfort in times of need and companionship in times of elation. I hope to one day embody the traits I admire most in Tux and share in the joy of others who have benefitted from my ability to reflect the selfless and caring spirit of Tux. Thank you, my angel, for giving me the greatest gift of loving beyond any measure I could imagine or words I could articulate. This work is also dedicated to my parents who worked tirelessly to afford me the opportunities essential for the pursuit of my dreams. I can never express how much I truly value your love and support, but I hope that I can demonstrate my appreciation through the work I have chosen to dedicate my life to.

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TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

Chapter 1: Introduction

Statement of the Problem

The literature has demonstrated a substantial relationship between factors related to psychopathy and juvenile delinquency, particularly, violent criminal offenses. A significant amount of research has focused on the relationship between psychopathy and violent, criminal misconduct but far less attention has been allocated to understanding the nature of this relationship as it applies to juvenile offenders (Hemphill et al., 1998; Sitney, 2016; Tatar et al., 2016). Fortunately, more recent research has begun to explore the relationship between psychopathy and recidivism among juvenile offenders (Pedro et al., 2012; Shaffer et al., 2015). Research has demonstrated findings which suggest that juveniles who present with more psychopathic characteristics have a higher likelihood of engaging in a variety of delinquent and criminal activities, including violent misconduct (Lynam & Gudonis, 2005; Shaffer et al., 2015; Tsang, 2018). A study conducted by Pedro and colleagues in 2012 found that juveniles with a significant number of psychopathic characteristics became involved in the justice system at a younger age, engaged in delinquent behaviors earlier in life, had higher reports of behavior problems and accompanied diagnoses of conduct disorder, as well as lower levels of self-esteem.

Research has also indicated that juveniles who possess pathological characteristics are more likely to reoffend compared to those who do not, suggesting a relationship between psychopathy and recidivism (Hemphill et al., 1998; Tsang, 2018; Worling, 2001). Edens and colleagues conducted a meta-analysis in 2007, the results of which showed that psychopathy was a strong predictor of general and violent recidivism among juvenile offenders. The literature is

trending towards the notion that psychopathic characteristics of juvenile offenders can serve as a predictive factor for engagement in violent criminal activities, as well as future reoffending (Shaffer et al., 2015; Sitney et al., 2016; Tsang, 2018). Psychopathy has also been linked to trauma, including exposure to violence, which is another factor associated with juvenile delinquency.

Environmental factors can contribute to the development of psychopathic traits and subsequent deviance (Hirstein, 2013; Pietz & Mattson, 2014). Research has provided support for the influence of environmental factors such as parental attachment, insufficient socialization in infancy and early childhood, parental incarceration, abuse, and exposure to violence in the home on the development of psychopathic traits including but not limited to callousness, narcissism, diminished empathy, shallow affect, lack of remorse, and impulsivity (Christian et al., 2017; Tuvblad et al., 2016; Waldman et al., 2018). Factors such as unstructured leisure time, insufficient guardianship and monitoring of youth, involvement with deviant peer group, geographic location of home, existence of psychopathological characteristics in guardians, and academic problems have all been shown to positively correlate with engagement in antisocial and delinquent behavior (Azeredo et al., 2019; Kerr et al., 2012; Mann et al., 2016; Trinidad et al., 2018). There has been a great deal of research focused on the role of environmental factors in relation to delinquency, but there has not been as much research dedicated to recidivism as an outcome (Grunwald et al., 2010; Trinidad et al., 2018).

Current literature exploring the impact of environmental factors on juveniles' engagement in delinquent behaviors and recidivism center around the presence of adverse childhood experiences (ACEs) which are defined as traumatic events that occur prior to the age of 18 and include all types of abuse and neglect as well as divorce, substance use, incarceration,

parental mental illness, and domestic violence (*Adverse Childhood Experiences (ACEs) - National Child Abuse Prevention Month* - Child Welfare Information Gateway, 2020). More recent studies that have examined environmental factors, specifically, ACEs and exposure to violence, have found that these factors increase the likelihood of recidivism for juvenile offenders (Tsang, 2018; Tuvblad et al., 2016). Further, juveniles that endorse high rates of adverse experiences are at higher risk to re-offend more quickly following release compared to same-age offenders without high exposure to ACEs (Tuvblad et al., 2016; Wolff et al., 2015). This finding was supported by another study conducted in 2013 which found that juveniles who have more chronic and direct exposure to community violence are more likely to continue engaging in criminal behavior (Baskin & Sommers, 2013).

There appears to be an established relationship between psychopathy, exposure to violence, and delinquency among juveniles. However, there continues to exist a need for more research dedicated to examining psychopathy and exposure to violence as potential predictors for recidivism among juvenile offenders respectively and in combination with one another. The lack of attention allocated to understanding the factors related to recidivism among juvenile offenders has enabled the continuation of under effective procedures to be employed by the Department of Juvenile Justice and other youth service providers. Although there are evidenced-based practices (EBPs) that have demonstrated efficacy, the stable recidivism rates among juveniles suggest that these treatment modalities could be improved. One way in which treatment interventions can be improved is through research centered on the variables associated with recidivism.

A more complete understanding of factors associated with delinquency and recidivism will allow for greater specificity of treatment and ultimately, improved effectiveness as evidenced by lower rates of recidivism. Broad findings within the current literature demonstrate

the existence of intersecting relationships between psychopathy, trauma, and propensity to engage in delinquent behavior, as well as re-offending (Christian et al., 2017; Shaffer et al., 2015; Trinidad et al., 2018; Wojciechowski, 2017). However, there remains a lack of research dedicated to furthering our understanding of the predictive power of the aforementioned variables which will allow for the establishment of more informed policies, procedures, and treatment protocols that will in turn reduce recidivism rates.

The findings of this study could contribute to the literature by providing research aimed at examining how psychopathy and exposure to violence relate to recidivism among juveniles. The results of this study will also be beneficial in helping to determine if psychopathy and exposure to violence are viable factors for predicting recidivism among juvenile offenders and allow for further investigation into the ability of offense type to predict types of future offenses and severity of offense. The current study could serve to inform future assessment of juvenile offenders and juveniles at risk for engaging in criminal behavior by providing a better foundation from which more effective treatment protocols can be tailored to the specific needs of juveniles, as a way to reduce recidivism and the rate of juvenile incarceration in our country.

Currently, approximately 48,000 juveniles are being held in residential placement, including juvenile detention centers and corrections facilities. This demonstrates a decline from the reported 54,000 juveniles detained in 2015 (Office of Juvenile Justice and Delinquency Prevention, 2015; Sawyer, 2019). More disturbingly however, in 2011 it was estimated that more than 95,000 juveniles were admitted into adult prisons and jails and this trend could serve to explain the decline in the reported number of youths detained in juvenile facilities (Neelum, 2011). Special consideration should be given to the discrepancy that exists between detainment and recidivism rates. The number of youths detained has decreased, but recidivism rates remain

at a stable and high rate (Multisystemic Therapy Institute, 2018). Considering the large proportion of juveniles currently incarcerated, it is imperative that research be focused on understanding the factors that contribute to recidivism so more efficient treatment protocols can be put in place to reduce the number of juveniles currently detained and those at risk of re-arrest.

Purpose

The primary purpose of this study is to determine whether a juvenile offender's level of exposure to violence along with their endorsement of psychopathic characteristics can serve as predictors for recidivism. Provided that both variables have been demonstrated in the literature to possess predictive power regarding juvenile offenders' propensity to re-offend, it stands to reason that determining if the capacity for prediction is increased by assessing for these variables in combination with one another is imperative for informing policies and procedures for the department of juvenile justice, as well as practitioners that provide rehabilitative services to these youth (Bonta & Andrews, 2017; Schraft et al., 2013; Sitney, 2016; Wolff et al., 2015; Worling, 2001). Current risk and needs assessments tools employed by the juvenile justice system include factors related to psychopathy but there appears to be an absence of attention allocated to inquiry of a juvenile's experience of specific types of trauma, including exposure to violence.

There is consensus within the literature regarding the correlational relationship that exists between trauma and the development and/or presence of antisocial characteristics within juvenile populations (Campbell et al., 2004; Graham et al., 2012; Hirstein, 2013; Schraft et al., 2013; Wolff & Baglivio, 2016). There also exists a vast amount of sound research dedicated to the relationship between antisocial and psychopathic characteristics and engagement in criminal behaviors and propensity to re-offend (Douglas et al., 2018; Hemphill et al., 1998; Tsang, 2018). However, less research has focused on this occurrence among juvenile offenders even though

available research suggests that individuals who meet criteria for Antisocial Personality Disorder most often have or would have met criteria for Conduct or Oppositional Defiant Disorder, all of which are implicated in elevated risk assessment scores of offenders (Edens et al., 2007; Mulder et al., 2010; Sitney, 2016; Wolff et al., 2015). The goal of this study is to increase our knowledge of the relationship between exposure to violence and psychopathic characteristics among juvenile offenders and ultimately, the ability for these variables to serve as predictors of juvenile offenders' level of risk for re-offending. The findings of this study should inform both the employment of efficacious services and treatment options provided to youth, as well as policies and procedures within the Department of Juvenile Justice.

Research Statement

The current study aims to examine the potential for the presence of psychopathic characteristics, as well as exposure to violence to serve as reliable predictors for recidivism among juvenile offenders in a region of the Southeastern United States. The study will attempt to discern the capacity for the predictive power of two primary variables: psychopathic deviance and exposure to violence. The study will further aim to explore the relationship that exists between characteristics of psychopathy endorsed by juvenile offenders and their level of exposure to violence in their homes and communities. In addition, the study intends to decipher whether or not the aforementioned variables will be better able to predict recidivism among juvenile offenders when combined as a predictor. The primary objective of the current study is to demonstrate findings that will assist in the assessment and treatment of juvenile offenders in order to provide these youth with more efficacious services which will diminish their propensity to engage in criminal behaviors and subsequently reduce recidivism rates. Additionally, the study

aims to provide findings that will inform more sensitive and effective policies and procedures within the juvenile justice system and also direct future research.

Definition of Terms

- Adverse Childhood Experiences: Traumatic events that occur prior to the age of 18 and include all types of abuse and neglect as well as divorce, substance use, incarceration, parental mental illness, and domestic violence (*Adverse Childhood Experiences (ACEs) - National Child Abuse Prevention Month* - Child Welfare Information Gateway, 2020)
- Adjudicated Youth: Adolescents involved in the juvenile justice system between the ages of 12 and 17 who have been determined as having committed a crime, per the court (Juvenile Justice Information Exchange, 2019)
- Adjudication: The formal finding of the juvenile court which is presented following an adjudicatory hearing or a guilty plea/admission from the juvenile youth in question (National Juvenile Defender Center, 2020)
- Antisocial Personality Disorder: Termed as a deeply ingrained and rigid dysfunctional thought process that focuses on social irresponsibility with exploitive, delinquent, and criminal behavior with no remorse. This disorder often manifests in the form of disregard for and the violation of others' rights and symptoms can include failure to conform to the law, deception, manipulation for personal gain, incapacity to sustain consistent employment, and inability to form stable relationships (Fisher, 2020)
- Conduct Disorder: A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate social norms or rules are violated, as manifested by the presence of at least three of the criteria within the following categories: aggression to people and animals, destruction of property, deceitfulness or theft, serious violation of

rules, and the disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning in the past 12 months with one criterion present in the past 6 months. If the individual is age 18 years or older, criteria cannot be met for antisocial personality disorder (American Psychiatric Association, 2013)

- Criminal Behavior: Classification referring to conduct of an offender that leads to and includes commission of an unlawful act (Criminal Behavior Law and Legal Definition, 2019)
- Delinquency: The behavior of a minor child that is marked by criminal activities, persistent antisocial behavior, or disobedience which the child's parents are unable to control (Champlin et al., 2019)
- Oppositional Defiant Disorder: Defined as a pattern of angry/irritable mood, argumentative/defiant behavior, or vindictiveness lasting at least 6 months as evidenced by at least four symptoms from the following categories: angry/irritable mood, argumentative/defiant behavior, and vindictiveness exhibited during interaction with at least one individual who is not a sibling (American Psychiatric Association, 2013)
- Psychopathy: Defined as a serious personality disorder characterized by antisocial behavior, untruthfulness, irresponsibility, and lack of remorse or empathy (Schell & Dawson, 2001)
- Recidivism: For juvenile offenders in the state of Georgia this term is defined as the adjudication for delinquent acts after a juvenile is released into the community while under Department of Juvenile Justice (DJJ) supervision or after DJJ supervision (Boggs & Worthy, 2016; Buckner, 2011; Niles et al., 2018)

- Risk Assessment Instrument: A tool used by evaluators to assess a juvenile's likelihood of future engagement in illegal activity. The items which comprise the instruments can reflect personal and life characteristics with the results informing decision-making points (e.g. diversion, detention, or disposition) and/or treatment planning (National Juvenile Defender Center, 2020)
- Status Offense: This term refers to nonviolent, noncriminal acts such as truancy, running away from home, curfew violations, underage alcohol consumption, and ungovernability that are only deemed a violation of the law due to the youth's status as a minor (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2015)
- Trauma: Defined as a deeply distressing or disturbing experience which results in severe psychological distress (Joseph, 2012).
- Post-traumatic Stress Disorder: The American Psychiatric Associations current definition states that a person must have experienced or witnessed an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and which involved fear, helplessness, or horror (American Psychiatric Association, 2013)
- Truancy: Defined by all states as a minor's unexcused absence from school without the knowledge of a parent or guardian (*Truancy Overview*, 2016)

Research Questions/Hypotheses

1. Is there a positive, correlational relationship between a juvenile's level of exposure to violence in their home and/or community (as observed by the subscale *Parent Perception of Child's Exposure to Violence* on the JOPGQ) and the number of characteristics

associated with psychopathy (as observed by Scale 4: Psychopathic Deviate on the MMPI-A) those juveniles endorse?

Hypothesis 1: Exposure to violence and psychopathic deviance will positively correlate.

2. Can a juvenile offender's level of exposure to violence in their home and/or community (as observed by the subscale *Parent Perception of Child's Exposure to Violence* on the JOPGQ) serve as a reliable predictor for their future engagement in criminal behavior?

   Hypothesis 2: Greater exposure to violence will significantly predict recidivism among juvenile offenders.

3. Can a Juvenile offender's endorsement of a significant number of factors associated with psychopathy (as observed by Scale 4: Psychopathic Deviate on the MMPI-A) serve as a reliable predictor for their future engagement in criminal behavior?

   Hypothesis 3: Clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A will significantly predict recidivism among juvenile offenders.

4. Can a juvenile offender's level of exposure to violence in their home and/or community (as observed by the subscale *Parent Perception of Child's Exposure to Violence* on the JOPGQ) in combination with their endorsement of a significant number of factors associated with psychopathy (as observed by Scale 4: Psychopathic Deviate on the MMPI-A) serve as a more reliable predictor for their future engagement in criminal behavior than either factor could alone?

   Hypothesis 4: Greater exposure to violence and clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A together will better predict recidivism among juvenile offenders than either would alone.

Chapter 2: Review of Related Research

Introduction

There appears to be an established relationship between psychopathy, trauma, and delinquency among juveniles, but there remains a gap in the literature with regard to how these variables serve as predictors for engagement in re-offending. A substantial amount of research has examined the relationship between psychopathy and violent, criminal behavior but far less attention has been apportioned to understanding the nature of this relationship within juvenile offender populations (Hemphill et al., 1998; Sitney, 2016; Tatar et al., 2016). Furthermore, there remains a need for research dedicated to investigating potential predictors for recidivism among juvenile offenders (Mulder et al., 2010). A more robust literature focused on the factors that contribute to juvenile offenders' propensity to re-offend will enable service providers and government agencies to offer more efficacious and adaptive solutions, which in turn will diminish recidivism rates and ultimately lessen the number of youth detained.

Recidivism Among Juvenile Offenders

Recidivism is a fundamental aspect of criminal justice that should be accounted for when working with juvenile offenders and creating more effective treatment modalities (Durose et al., 2014; Mulder et al., 2010; Wolff & Baglivio, 2016). It is important first, to understand how recidivism is defined in the legal context. The National Institute of Justice defines recidivism as a person's relapse into criminal behavior, often after the person receives sanctions or undergoes intervention for a previous crime (National Institute of Justice [NIJ], 2014). Recidivism is often measured by illegal acts that result in re-arrest, reconviction, or return to incarceration during a

three-year period of time following an offender's release (Durose et al., 2014). However, recidivism can be difficult to measure and study among juvenile offenders due to the fact that each state's juvenile justice system differs in how they define, measure, and report recidivism rates (Sickmund & Puzzanchera, 2014). The ability to quantify and track recidivism rates among juvenile offenders is further complicated by the arbitrary detainment of juveniles. In 2019, it was reported that 9,500 youth were detained prior to a legal hearing or awaiting disposition (Sawyer, 2019). Apart from pretrial detention, youth are detained for status offenses and technical probation or parole violations which are not considered law violations for adult offenders (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2015; Sawyer, 2019). Therefore, there are no available statistics on national recidivism rates for juvenile offenders.

Recidivism rates for juvenile offenders are offered at the state level. Recidivism for juvenile offenders in the state of Georgia is defined as the adjudication for delinquent acts after a juvenile is released into the community while under Department of Juvenile Justice (DJJ) supervision or after DJJ supervision (Boggs & Worthy, 2016; Buckner, 2011; Niles et al., 2018). Recidivism is measured in Georgia by tracking juveniles after their release for a three-year follow-up period or until a subsequent adjudicated offense occurs (Boggs & Worthy, 2016; Buckner, 2011; Niles et al., 2018). The Recidivism Report published by the Georgia Department of Juvenile Justice noted that the release population has decreased consistently since 2004, but the recidivism rate among juveniles has increased consecutively since 2003 (Buckner, 2011).

In accordance with the three-year follow-up protocol, recidivism among juveniles in Georgia is as follows: 34% recidivism one-year post release, 41% recidivism two years post release, and 45% recidivism three years post release (Buckner, 2011). Recidivism rates differ among demographic variables used to categorize juvenile offenders. Youth demonstrate the

highest one-year recidivism rate at 14 years of age at 36.9% and the lowest rate for youth admitted at 17 years of age at 8.2% (Niles et al., 2018). Reportedly 57% of African American youth re-offend within three years compared to 15% of White youth (Walls, 2014). According to the Georgia Department of Juvenile Justice Recidivism Update in 2018, females are less likely to re-offend compared to their male counterparts with recidivism rates at three years post release comprised of 16% female and 84% male (Niles et al., 2018). Alarmingly, more than half of the juveniles released from incarceration or supervision in Georgia re-offend (Georgia Department of Juvenile Justice, 2016). Recidivism among juvenile offenders in Georgia remains high, notwithstanding the enactment of the Juvenile Justice Reform Act which subsequently increased funding allocated to programs aimed at reducing recidivism rates (HB 242, Georgia Assembly, 2013-2014).

Risk Assessment Factors and Instruments

The 2018 Recidivism Report found that Georgia has comparable rates of recidivism among juvenile offenders with states that have a similar measure of recidivism. The report also noted that a juvenile's Comprehensive Risk and Needs (CRN) assessment risk score is a strong predictor of the likelihood of recidivism (Baird et al., 2013; Buckner, 2011; Niles et al., 2018). A risk and needs assessment tool is intended to measure identified criminogenic risk factors along with specific needs that would serve to reduce the propensity for offenders to engage in criminal behavior, if those factors are appropriately addressed (Bonta & Andrews, 2018; Latessa & Lovins, 2010; Risk/Needs Assessment, 2011). The Risk-Needs-Responsivity (RNR) model has become the principal paradigm in risk and needs assessment and serves as the primary foundation for the development of risk and needs assessment instruments, as well as offender rehabilitation programs (Bonta & Andrews, 2018; James, 2018). There are three inherent

principles within the model, the risk principle, the needs principle, and the responsivity principle. The risk principle posits that offenders require placement in programs which are commensurate with their determined level of risk. The needs principle states that treatment should focus on the criminogenic needs that contribute and should avoid attending to needs unassociated with criminal misconduct in order to be most efficacious. Lastly, the responsivity principle posits that rehabilitation programs should be delivered in a manner that accounts for the abilities and learning style of participating offenders (Bonta & Andrews; James, 2018).

The assessment instruments that have developed out of the RNR model are comprised of dynamic and static risk factors (James, 2018). Dynamic risk factors, also referred to as criminogenic needs, are potentially changeable elements; whereas static factors denote historical features of an offender and are not amenable to intervention (Bonta & Andrews, 2017; Risk/Needs Assessment, 2011). Major risk and needs factors, termed the "central eight" include: history of antisocial behavior, antisocial personality pattern, antisocial cognition, antisocial associates, family/marital circumstances, school/work, leisure/recreation, and substance abuse (Bonta & Andrews, 2018; James, 2018). The risk factors, demonstrated by findings in the literature, which have the highest correlation with engagement in deviant behavior that can also be reformed through employment of effective intervention including social supports for crime, poor family/marital relationships, substance abuse, antisocial personality pattern, pro-criminal attitudes, lack of prosocial recreational activities, and school/work failure (Bonta & Andrews, 2017; Risk/Needs Assessment, 2011). The identified static risk factors associated with an offenders' propensity to re-engage in criminal behavior include age of first arrest, current offense, and number of prior convictions (Eisenberg et al., 2019; Risk/Needs Assessment, 2011). Notably, a study in 2001 found that a juvenile's originating offense can be used not only to

predict level of risk for reoffending but can also inform the predicted severity of subsequent criminal offenses. Research has also found that juveniles with low-level status offenses are more likely to recidivate with a status offense (e.g., truancy) (Cottle et al., 2001). However, there is insufficient research currently available to determine if the results found by Cottle and colleagues (2001) holds true across settings and demographic variables, as well as over time.

The PEW Center on the States issued a brief in 2011, informed by their Public Safety Performance Project, which stated that valid risk assessment tools can differentiate between high, medium, and low-risk offenders (The Pew Center, 2011). There are a multitude of assessment tools employed to determine risk factors, needs of offenders, or a combination of the two domains. Although a multitude of risk and need assessment instruments exist, they typically operate similarly. Assessment instruments are comprised of questions which help to guide an interview conducted with an offender and gather pertinent information regarding behavior and attitudes/beliefs which research has identified as correlates with risk of recidivism (Bonta & Andrews, 2018; James, 2018). Supplemental data is subsequently collected from an official records check which identifies relevant information from informant reports, criminal history records, and other related sources. The information is integrated and then the risk and needs assessment instrument generates a total score which categorizes an offender into one of three risk groups: low, moderate, or high (James, 2018). According to the Pew Charitable Trusts, the most widely used risk assessment tool for juvenile offenders currently is the Level of Service/Case Management Inventory (LS/CMI).

The LS/CMI has demonstrated validity and reliability in its ability to accurately identify an offenders' level of risk for engagement in future criminal behavior (Andrews et al., 2012; Risk/Needs Assessment, 2011). The LS/CMI, like many other assessment tools aimed at

determining risk for re-offense, measures identified dynamic and static risk factors and classifies offenders into a risk category (Bonta & Andrews, 2017; Eisenberg et al., 2019). A number of instruments have been developed over time, which have established validity and are used commonly by the state and federal correctional facilities in order to assess an offenders' level of risk for reoffending (Zamble & Quinsey, 2001). Although these assessment instruments are able to predict recidivism rates better than chance, there remains room for improvement, especially for improved accuracy when employed with juvenile populations (Baldry & Sorrentino, 2017; Zamble & Quinsey, 2001). Allocating attention to specific factors which have already been identified as correlating significantly with recidivism among juvenile offenders can further our understanding of the predictive power of those factors and can inform more effective treatment protocols. As mentioned previously a study by Cottle and colleagues (2001) suggested that type of first offense could predict future risk of recidivism and severity of subsequent criminal activity. If more research focuses on individualized factors and their power to predict various details of future reoffending behavior, service providers could be better equipped to treat offenders effectively and potentially contribute to a decline in recidivism and incarceration rates.

The Recidivism Report published by the DJJ provided some insights into the rates and trends of recidivism among juveniles, as well as some of the predictive factors related to recidivism. However, the Recidivism Report only touched on a refined portion of the factors that can influence a juvenile's potential to reoffend. It is also important to note that the 2018 Recidivism Report only provided statistics for juveniles categorized as either male or female and did not offer information regarding the criteria for categorization or non-binary category options. Gender identity, along with other variables such as race and age, are all vital factors to consider, as they serve to influence the internal characteristics of youth and how they likely experience

external events, such as exposure to trauma. The brief issued by the Pew Center on the States provided a more comprehensive list of factors closely associated to risk for reoffending. Although the identified factors which serve to inform the development of risk/needs assessment tools address a multitude of variables demonstrated by research to influence an offender's risk for reoffending, there remain gaps in these tools which could more accurately inform treatment and allow for more positive outcomes as evidenced by lower rates of recidivism.

Psychopathy

One of the foundational factors present in the assessment of offenders and research devoted to understanding the nature of criminogenic thinking and criminal misconduct is psychopathy and associated traits. Therefore, it is imperative that psychopathy as a construct is addressed and described in order to provide a framework from which to interpret the following information offered regarding the role of psychopathy in recidivism. Psychopathy is characterized as a neurodevelopmental or personality disorder (Blair, 2010; Freeman, 2013). Psychopathy is a spectrum disorder that can be diagnosed using the Hare Psychopathy Checklist-Revised (PCL-R) and its direct derivatives: The Psychopathy Checklist: Screening Version (PCL: SV) and the Psychopathy Checklist: Youth Version (PCL: YV) (Hare & Neumann, 2009). Psychopathy is not currently included in the Diagnostic and Statistical Manual of Mental Disorders-5th Edition (DSM-5) as a disorder, so it is typically diagnosed as Antisocial Personality disorder for adults and Conduct disorder or Oppositional Defiant disorder for children and adolescents (Salekin, 2016; Wygant et al., 2016).

Psychopathy has been classified in the research literature as a personality disorder insinuating that the symptoms are associated with fundamental neurological dysfunction, genetics, and exposure to detrimental environmental factors during childhood (Freeman, 2013;

Lynam & Gudonis, 2005; Moreira et al., 2020). Considering the potential harm that individuals classified as psychopathic pose to society, substantial research has been devoted to understanding the factors which correlate with and influence the manifestation of associated symptoms. Findings in the literature have demonstrated support for the existence of deficits or dysfunction in regions of the brain concerned with bonding, reward, morality, and affective and emotional processing systems, in individuals who present with strong psychopathic traits (Blair, 2003; Blair et al., 2006; Freeman, 2013). Specifically, deficits and abnormalities have been discovered in the following brain regions: amygdala, anterior and posterior cingulate gyrus, anterior insular cortex, parahippocampal gyrus, anterior superior temporal gyrus, ventromedial prefrontal cortex, and white matter communication tracts (Freeman, 2013; Kiehl, 2006; Motzkin et al., 2011). Considering the regions of the brain implicated in the presence of psychopathy, it is easy to assume the traits and characteristic associated with psychopathy.

The primary characteristics associated with psychopathy and often used in the assessment of an individual for diagnostic purposes include: glibness/superficial charm, grandiose sense of self-worth, need for stimulation/proneness to boredom, pathological lying, conning/manipulation, lack of remorse or guilt, shallow affect, callous/lack of empathy, parasitic lifestyle, poor behavioral controls, promiscuous sexual behavior, early behavioral problems, lack of realistic, long-term goals, impulsivity, irresponsibility, failure to accept responsibility for own actions, short-term romantic relationships, juvenile delinquency, revocation of conditional release, and criminal versatility (Archer & Wheeler, 2013; Hare, 1999). As with most other disorders, within psychopathy there exists variation (Freeman, 2013). There are a set of core symptoms or traits, but the manifestation and presentation of these can be mediated by both

internal and external factors including the presence of other mental disorders, genetics, childhood maltreatment, and exposure to trauma, among many others.

Psychopathy includes personality features, as well as affective characteristics, which imply impairments to the formation of secure relational bonds inhibiting engagement in behaviors that abide by social norms and facilitate engagement in deviant behaviors (Hemphill et al., 1998; Kerr et al., 2012; Tatar et al., 2016). The lack of empathy associated with psychopathy is specific to emotional empathy, meaning an individual with psychopathy has the capacity to understand intellectually the emotion another person may be feeling and the implications of that emotional state but cannot experience for themselves the same state of being (Freeman, 2013; Goleman, 2007). According to Hare (1993) "the truth is, the personality structure of the psychopathy spells trouble for the rest of us" (p.87).

Psychopathy and Criminal Misconduct

A vast amount of research has been devoted to demonstrating a substantial relationship between psychopathy in adult criminal offenders, but its relationship to juvenile offenders is less established. As such, psychology literature has made a concerted effort to allocate research on the potential relationship that exists between psychopathy and juvenile offenders' engagement in criminal misconduct (Lynam & Gudonis, 2005; Saltaris, 2002; Sitney, 2016; Worling, 2001). A study conducted in 2004 examined the clinical, psychosocial, and criminal correlates of psychopathic traits in 226 juvenile offenders. The results of the study demonstrated that higher self-reports on the Psychopathy Checklist-Youth Version (PCL-YV) (Forth et al., 2003; Hare & Neumann, 2009) were positively associated with delinquency and violent criminal history (Campbell et al., 2004). Juvenile psychopathy is robustly related to deficits in emotional processing and inhibition, as well as low levels of agreeableness and conscientious which further

supports research demonstrated links between juveniles with strong psychopathy characteristics and engagement in offending behaviors and other externalizing problems (Lynam & Gudonis, 2005). A 2012 study analyzed the role of psychopathic traits in 543 juvenile offenders and produced results showing that juveniles with high psychopathic traits had greater instances of behavior problems, higher percentages of conduct disorder diagnoses, diminished self-esteem, engaged in criminal behaviors at an earlier age, and became involved in the justice system earlier in life (Pedro et al., 2012).

A more recent study conducted by Shaffer and colleagues (2015) sought to examine the relationship that exists between psychopathy and juveniles categorized as violent offenders. The study found that youth classified as psychopathic were more violent, engaged in rule breaking behaviors more frequently, and demonstrated higher levels of criminal misconduct compared to their less psychopathic peers (Shaffer et al., 2015). Research has indicated that juveniles who commit more serious crimes are expected to continue committing crimes into adulthood with progressively more serious offenses being perpetrated as they age (Mulder et al., 2010). The aforementioned findings suggest that the characteristics and neurological abnormalities associated with psychopathy create the ideal foundation for continual engagement in antisocial and offending behaviors.

Psychopathy and Recidivism

Current research on recidivism among juvenile offenders has focused on both intrinsic and extrinsic factors, which serve to increase juveniles' propensity to recidivate. A greater portion of research however has been focused on internal characteristics of juvenile offenders that negatively influence recidivism rates (Campbell et al., 2004; Mulder et al., 2010; Wojciechowski, 2017). Research has demonstrated that conduct problems, aggressive behavior,

antisocial characteristics, impulsive behavior, isolation, and behavioral patterns exhibiting excessive overt control are intrinsic factors that have been associated with increased likelihood of recidivism among juvenile offenders (Cottle, et al., 2001; Worling, 2001). Current research has also identified attention-deficit/hyperactivity disorder (ADHD) as a risk factor for engagement in reoffending, specifically for violent offenses (Wojciechowski, 2017). Many of the aforementioned intrinsic characteristics linked to recidivism are also associated with psychopathy.

A study conducted in 2001 investigated recidivism among four personality-based subgroups comprised of 112 male juvenile offenders. The results of the study suggested that juvenile offenders in the more pathological groups (Antisocial/Impulsive and Unusual/Isolated) were more likely to recidivate (Worling, 2001). The study by Worling demonstrates that juveniles who possess pathological characteristics are more likely to reoffend compared to those that do not, suggesting a relationship between psychopathy and recidivism. A meta-analysis conducted in 2007 aimed at investigating youth psychopathy as a predictor for future crime and violence (Edens et al., 2007). The meta-analysis examined data for the Psychopathy Checklist across 21 non-overlapping samples of juvenile offenders. The results of the meta-analysis showed that psychopathy was a strong predictor of general and violent recidivism among juvenile offenders (Edens et al., 2007).

A more recent study conducted in 2016 examined psychopathy and violent behavior in 257 delinquent juveniles. The results of the study indicated that psychopathic features strongly predicted violent recidivism among juvenile offenders (Sitney et al., 2016). Genetics, environment, and an individual's brain anatomy can all contribute to the development of psychopathic traits and subsequent deviance (Hirstein, 2013). Psychopathic traits have

specifically been focused on in the literature in relation to delinquency and recidivism among criminal offenders. Although a basis of research exists in support of a relationship between psychopathy and recidivism among juvenile offenders, some inconsistencies still remain in the literature in regard to the role of psychopathy in reoffending.

Trauma and Psychopathy

As mentioned previously environmental factors can contribute to the development of psychopathy and manifestation of psychopathic deviance. A study exploring the effects of adverse childhood experiences (ACEs) on the development of maladaptive personality traits found that greater exposure to ACEs was associated with significant increases in juvenile's aggression and impulsivity (Perez et al., 2016). Psychopathic behavior has been continually linked to attachment and child maltreatment, more specifically exposure to violence and physical abuse (Campbell et al., 2004; Sevecke et al., 2016; Tsang, 2018). Attachment theory posits that a strong emotional and physical attachment to a primary caregiver is crucial for functional development (McLeod, 2017). A recent study found that grandiose-manipulative psychopathy facets were positively related to attachment anxiety whereas impulsive-irresponsible psychopathy facets were related to both attachment avoidance and anxiety (Conradi et al., 2015). The researchers further posit that abusive and neglectful parenting likely contribute to the development of psychopathy (Conradi et al., 2015).

A study by Anne and colleagues in 2018 also found that psychopathy significantly correlated with childhood trauma in a sample of 253 juvenile offenders. Research has also demonstrated psychopathy and ACEs are both strongly related to property and drug offending specifically (Heirigs, 2020). A study conducted in 2012 found that childhood physical abuse and neglect are associated with antisocial behavior (Graham et al., 2012). Additionally, the study

indicated that childhood sexual abuse is associated with a grandiose and manipulative interpersonal style, as well as an impulsive-irresponsible lifestyle, all of which are factors associated with psychopathy (Graham et al., 2012).

A more recent study demonstrated results which revealed associations between physical abuse, emotional dysregulation, and psychopathic traits in juvenile offenders. Notably, childhood maltreatment correlated significantly with antisocial dimensions on the Psychopath Checklist-Youth Version (PCL: YV) (Sevecke et al., 2016). Sevecke and colleagues (2016) also addressed the concern of utilizing large constructs such as psychopathy or trauma as predictors and highlighted the importance of research focused on more specific aspects of these domains in order to produce results that will better inform specific treatment methods. A more nuanced understanding of juvenile offenders' trauma histories may not only be a pathway to psychopathy but also a vital aspect of their overall assessment and treatment (Anne et al., 2018).

Another study conducted in 2013 specifically aimed to investigate the potential of exposure to violence being a risk factor for the development of psychopathy using a sample of 147 juvenile offenders (Schraft et al., 2013). The results of the study posit that trauma, as a result of exposure to violence, was associated with psychopathy. Specifically, exposure to violence in the community strongly correlated with interpersonal, behavioral, and antisocial factors of psychopathy. Exposure to violence in the home was uniquely correlated with behavioral factors attributed to psychopathy (Schraft et al., 2013). A recent study conducted in 2017 examined how psychopathy, exposure to violence, and PTSD are associated with antisocial behavior. The study included 1,354 juvenile offenders (Tsang, 2018). The study demonstrated that both psychopathy and exposure to violence correlate with delinquency. However, exposure to violence was uniquely associated with increased delinquent behavior among juvenile offenders (Tsang, 2018).

The aforementioned literature demonstrates the potential contribution of environmental factors, particularly exposure to violence, to the development of core components of psychopathy, which has been shown to increase the likelihood of engagement in deviant behavior, criminal misconduct, and recidivism among juvenile offenders.

The literature suggests that exposure to violence is a potential contributor to the development of psychopathy (Shraft et al., 2013; Tsang, 2018). Research has also implied that psychopathic traits are vulnerable to environmental influence, including social context, which may foster engagement in antisocial activity (Tatar et al., 2016). A hostile interpretation of one's environment has been found to increase antisocial behavior in juveniles (Moreira et al., 2020; Wolff & Baglivio, 2016). A relationship between trauma and psychopathy has been established with implications regarding the potential for specific environmental influences to contribute to the manifestation of traits associated with psychopathy, which inherently lend themselves to the propensity for engagement in socially condemned behavior. It is imperative to have a foundational understanding of trauma and the neurological and psychological consequences that result from exposure to traumatic events in order to better understand how one's experience of trauma can cultivate a psychological framework conducive for engagement in criminal misconduct and delinquent behaviors.

Defining Trauma

Psychological trauma is defined as a type of psychological damage caused by a distressing event or a series of distressing events (Rosen, 2019). Exposure to adverse childhood experiences can result in one's experience of trauma. Exposure to ACEs can also serve as the caveat to the development of Posttraumatic Stress Disorder (PTSD). PTSD is a trauma-related disorder that can emerge after exposure to a traumatic stressor (Rosen, 2019; Torres, 2020).

Symptoms of PTSD are categorized into four separate dimensions: intrusive thoughts related to the trauma, emotional numbing, avoidance of distressing stimuli, and hyperarousal (Torres, 2020). Hyperarousal is the key symptom that differentiates PTSD from other anxiety-based mental illnesses (Ford & Russo, 2006; Somerlott, 2019). The three remaining symptoms (numbing, intrusive thoughts, and avoidance) can be understood as attempts to modulate hyperarousal. Per Ford and Russo (2006), hyperarousal is described as the tendency for the brain and nervous system to react in a rapid, extreme manner to trauma-related stressors; hyperarousal is also seen as the loss of ability to self-regulate both emotional and neurobiological states. To manage hyperarousal, an individual may develop reflexive adaptive techniques to manage the intense affective distress that accompanies hyperarousal (SAMHSA, 2014). These amplified reflexive responses are the result of acute changes to the neurobiological circuitry of the sympathetic nervous system, which induces a near constant fight or flight state (Sherin & Nemeroff, 2011). For example, an individual may become exceptionally preoccupied with any perceived sign of threat or trigger associated with the trauma; this may result in extreme preoccupation with anxiety inducing triggers or intrusive thoughts relating to the traumatic event. Avoidance of stimuli that may trigger anxiety can also be understood to be a coping strategy to mitigate hyperarousal; if an individual is unable to regulate his or her emotional or physiological response to traumatic stimuli, he or she may avoid them altogether (Ford & Russo, 2006). Finally, emotional numbing is the complete "shutting down" of emotional reaction or the decrease in personal ability to recognize and understand emotional states. As the presence of PTSD symptoms persist, emotional and physiological dysregulation becomes exacerbated (Ford & Russo, 2006).

Trauma and Executive Function

The aforementioned four dimensions affect individuals who have experienced trauma in different ways, but each can lend itself to engagement in maladaptive and potentially delinquent behaviors. Behavior is informed by the way in which events are perceived and the thoughts that are endorsed as a result of one's perception (Roebers, 2017). Trauma has been demonstrated in the literature to disrupt and inhibit regions of the brain, specifically the frontal cortex, which is responsible for the engagement of executive functions (Gonzalez et al., 2018). Executive function refers to a set of skills necessary for performing higher order cognitive processes involved in regulation, organization, monitoring goal-directed behavior, and planning (Lagattuta et al., 2015; Yeates & Taylor, 2001). Executive function and self-regulation skills are dependent upon three specific types of brain function including mental flexibility, working memory, and inhibition including both self-control and interference control (Center on the Developing Child, 2020; Diamond, 2020). Mental flexibility aids in the ability to sustain or shift attention in response to various demands and also enables the application of different rules in different settings. Working memory directs the retention and manipulation of select pieces of information for limited periods of time. Self-control allows for individuals to prioritize and inhibit impulsive actions and responses to various situations and stimuli (Center on the Developing Child, 2020). Deficits or dysregulation in the area of the brain associated with executive functions impedes one's ability to employ mental processes that could inhibit or prevent engagement in delinquent and criminal behaviors.

Research is clear that there is a relationship between trauma exposure and impairments in executive function. Studies suggest that PTSD has demonstrated dysregulation of the neurocircuitry related to executive functioning such as threat appraisal, reward processing,

affective self-regulation, and changes to information processing (Beckham et al., 2005). A 2009 study found that children's exposure to familial trauma was associated with lower scores on measures of executive function including working memory, inhibition, auditory attention, and processing speed tasks (DePrince et al., 2009). A 2010 study also found that adults exposed to trauma as children score lower on measures of executive function; further, the type of trauma exposure correlated with lower scores on specific subtests (Majer et al., 2010). According to the findings of Majer and his colleagues, emotional abuse was specifically associated with lower performance on spatial memory measures, and physical neglect was associated with impaired performances on working memory and pattern recognition memory tasks (Majer et al., 2010). As it stands, research is available which lends support to the relationship that exists between trauma and impaired executive function. The established relationship between executive function and trauma exposure has been discussed, but it is important to understand how the implications of the affect trauma exposure can have on the development of executive functions serve to facilitate engagement in delinquent behavior and also increase the likelihood of continual engagement in criminal misconduct.

Trauma and Criminal Misconduct

Current literature aimed at investigating the impact of environmental factors on juveniles' engagement in deviant behaviors and criminal misconduct center around the presence of adverse childhood experiences (ACEs) which are defined as traumatic events that occur prior to the age of 18 and include all types of abuse and neglect (Child Welfare Information Gateway, 2020; SAMHSA, 2017). ACEs can include but are not limited to physical, emotional, and sexual abuse, emotional and physical neglect, parental separation or divorce, household substance use, incarceration of a parent or family member, parental mental illness, death of parent or sibling,

and witnessing domestic violence (Bauer, 2020; Child Welfare Information Gateway, 2020). Research has demonstrated a link between the adverse childhood experiences a juvenile has been subject to and their later engagement in deviant and offending behaviors (Hunt et al., 2017; Perez et al., 2016; Wolff et al., 2015).

An article published in 2015 specifically examined the effects of ACEs on engagement in criminal misconduct and identified adverse childhood experiences (ACE) as a risk factor for delinquency among juvenile offenders (Wolff et al., 2015). Another study in 2016 sought to examine the direct and indirect effects of ACEs on serious, violent, and chronic (SVC) delinquency among 64, 329 juvenile offenders. Perez and colleagues found that a higher ACE score significantly increased the likelihood of a juvenile being classified as an SVC delinquent (Perez et al., 2016). Further, the results of the study suggest that a significant proportion of the relationship between ACEs and engagement in deviant behaviors is mediated by personality traits associated with psychopathy, including aggression and impulsivity (Perez et al., 2016).

Childhood maltreatment and exposure to ACEs can place youth at risk for inadequate maturation which may manifest as symptoms of maladaptive functioning throughout stages of development and contribute to perpetual engagement in dysfunctional and deviant behaviors (Cicchetti & Toth, 2005, 2008). ACEs have been identified as a critical risk factor for engagement in delinquent and criminal behavior and considering the impact that exposure to ACEs can have on development, childhood adversity has also been implicated in the propensity for reoffending.

Trauma and Recidivism

More recent studies in the current literature have begun exploring the relationship between child maltreatment, including exposure to violence, and recidivism among juveniles. A

study conducted by Baglivio and colleagues in 2015 investigated the relationship between ACEs and longitudinal offending patterns. Results of the study indicate that exposure to multiple ACEs distinguished early-onset and habitual offending from other patterns of offending among juveniles (Baglivio et al., 2015). The researchers postulate that assessment of exposure to ACEs can assist in the prediction of future offending for juveniles. A study by Wolff and Baglivio (2016) examined the effect of ACE on engagement in criminal misconduct, as well as recidivism among juvenile offenders. The results supported Baglivio's earlier research, suggesting that not only do ACEs increase the likelihood of recidivism, but a higher prevalence of ACEs facilitates re-offense more quickly following release (Wolff & Baglivio, 2016). Juvenile offenders report significantly high rates of ACEs compared to other juvenile and adult populations (Baglivio et al., 2014). The current literature provides evidence in support of the notion that various adverse experiences can facilitate increased likelihood of recidivism among juvenile offenders.

Increased exposure to adverse childhood events and maltreatment among juvenile offenders highlights the need for the examination of the effects of ACEs on subsequent reoffending (Wolff et al., 2015). Results of a study conducted in 2013 found that juveniles who have more chronic and direct exposure to community violence are more likely to continue engaging in criminal behavior (Baskin & Sommers, 2013). A juvenile's exposure to violence, whether in the home or in the community, appears to be a predictive factor for recidivism among juvenile offenders.

Psychopathy, Exposure to Violence, and Recidivism

There appears to be more research dedicated to understanding the intrinsic risk factors for recidivism among juvenile offenders (Mulder, 2010; Wojciechowski, 2017). However, more research has begun to focus on the role of environment as a factor in a juvenile offender's

likelihood to reoffend. Psychopathy and associated factors have been linked to both delinquency, as well as recidivism (Edens et al., 2007; Sitney et al., 2016). There remains a need for more research dedicated specifically to examining the relationship between psychopathy and recidivism among juvenile offenders, as it could potentially be a sufficient predictor of recidivism. A lack of research on exposure to violence in relation to recidivism among juvenile offenders also exists in the current literature. Considering that a relationship has been demonstrated between psychopathy, exposure to violence, and delinquent behavior, as well as ACEs and the development of psychopathic characteristics, it would be interesting to investigate exposure to violence and psychopathy specifically as predictors of future delinquent behavior among juvenile offenders.

There has been a great deal of research focused on both the presence of psychopathic traits and the role of environmental factors in relation to delinquency, but there has not been as much research dedicated to recidivism as an outcome (Grunwald et al., 2010; Hemphill et al., 2011). Available research has provided evidence in support of a relationship between psychopathy and recidivism among juvenile offenders. Prior research has indicated that juveniles exposed to adverse parental interactions and those with maltreatment histories are more likely to present with psychopathic characteristics and are also at a higher risk to reoffend (Wolff & Baglivio, 2016). It is reasonable then, to believe that exposure to violence could also be a predictive factor for reoffending among juveniles. Further investigation into the predictive power of both the presence of psychopathy among juvenile offenders along with their level of exposure to violence is necessary in order to modify policies and treatment protocols which will afford youth better opportunities for rehabilitation and subsequent success in evolving as functional members of society.

Chapter 3: Methods

Description of the Sample

Participants for the study were chosen retroactively from the Juvenile Counseling and Assessment Program (JCAP) database housed in the Department of Counseling and Human Development in the Mary Frances Early College of Education at the University of Georgia. Along with archival data, new participants referred to JCAP by the Department of Juvenile Justice (DJJ) were asked to participate, as long as they met criteria for inclusion. Participants who met inclusion criteria were asked to participate in the study by the researcher either by phone or in person. Participants were informed about the aims of the study, as well as participant expectations. The researcher also informed participants that their decision to engage in the study was on a voluntary basis, they would receive no direct gains or incentives for participation, no identifiable information would be included in the research, and they could choose to leave the study at any point without consequence.

The sample for the study was comprised of male and female juvenile offenders who completed a valid MMPI-A and whose guardian had completed the JOPGQ thoroughly. The sample was divided into non-recidivism and recidivism groups. These groups were determined according to records obtained from the Juvenile Tracking System (JTS). Participants were placed into the non-recidivism group if they had not been convicted of another offense after conviction of their first offense, while the participants that were adjudicated of another offense subsequent to their first infraction were placed into the recidivism group. Criminal offense will be

operationalized as an act or acts resulting in conviction of legal charges recognized by the State of Georgia.

Participants included in the sample were between 12 and 16 years of age. This age range was set because the MMPI-A is inappropriate for use with adolescents younger than 12 years of age and the study looked to examine recidivism after the juvenile's initial offense. Also, the JTS ceases to report on juveniles once they reach age 18, so juveniles past the age of 16 could potentially age out and skew the data if they reoffended after 18 years of age.

The sample consisted of 16 participants in the non-recidivism group and 191 participants in the recidivism group, creating a total sample size of 207 participants. This sample size was chosen because it should be large enough to produce sufficient power when analyzing the data in order to facilitate accurate identification of significance within the results. Considering the information provided in the current literature, both males and females were included in the sample.

Instruments

Exposure to violence was measured utilizing the Juvenile Offender Parent/Guardian Questionnaire (JOPGQ). Specifically, the subscale *Parent Perception of Child's Exposure to Violence* was used as the measurement for exposure to violence in the current study. Psychopathic Deviance was measured using Scale 4 on the MMPI-A, *Psychopathic Deviate*. Data on recidivism was gathered from client files and the Juvenile Tracking System (JTS) with assistance from Dr. Brian Glaser. Recidivism was determined based upon the conviction of a juvenile offender after their initial infraction or retroactively from an intake provided by the Juvenile Counseling and Assessment Program (JCAP) team.

Juvenile Offender Parent/Guardian Questionnaire (JOPGQ)

The JOPGQ is a 67-item questionnaire designed to measure various parental constructs that relate to juvenile delinquency and behavioral problems. The items are placed on a Likert scale, with the response set being: 1= completely false, 2= mostly false, 3= mostly true, and 4= completely true. The measure was created from a pool of items, which were derived from a model of parent competency (Glaser et al., 2005). The instrument, consisting of numerous items, was initially administered to 243 parents of children who were involved in the juvenile court system. An Exploratory Factor Analysis was subsequently run on each of the items, which comprised the measure and revealed a six-factor solution (Glaser et al., 2005). The resulting JOPGQ consists of six subscales, including: Exasperation in Regard to the Child, Mistrust of the Justice System, Shame Over Parenting Self-Efficacy, Parental Monitoring, Fear of the Child, and Parent Perception of Child's Exposure to Violence (Glaser et al., 2005). A study conducted in 2013 indicated that the parental competency model of the JOPGQ has an adequate level of fit, providing cross-validation for the original exploratory model (Snyder et al., 2013). The Cronbach alphas for the six scales are as follows: Exasperation in Regard to the Child (.92); Mistrust of the Justice System (.82); Shame Over Parenting Self-Efficacy (.71); Parental Monitoring (.83); Fear of the Child (.92); and Parent Perception of Child's Exposure to Violence (.82) (Snyder & Glaser, 2014). The aforementioned reliability scores demonstrate a modest reliability of the total scale and provide support for the homogeneity of the scales (Snyder & Glaser, 2014).

The JOPGQ was selected for this study because it was informed by years of clinical experience working with juvenile offenders and their families. Use of the JOPGQ as a tool for the prevention of recidivism among juvenile offenders has been supported as well (Glaser et al.,

2005). Also, no other comprehensive measure currently exists that assesses parental beliefs and practices as they related to juvenile offenders. Considering the sample was comprised of young adolescents, obtaining the parent or guardian's perspective on the juvenile's exposure to violence may provide a more accurate account of the violence the juvenile realistically has been exposed to. Altogether, the JOPGQ offers all of the necessary elements that relate to the factors examined in the current study and provide a seemingly valid assessment of the level of violence that the juvenile participants have experienced.

Minnesota Multiphasic Personality Inventory® –Adolescent (MMPI-A)

The MMPI-A is a structured psychological instrument, based on the MMPI-2, intended to measure personality traits and psychopathology. The MMPI-A is comprised on 478 true/false items. The MMPI-A consists of 10 clinical scales, which assess major categories of abnormal behavior and four validity scales, used to determine the participant's test-taking attitude and whether they answered the items truthfully and accurately (MMPI-A Scales, 2015). The 10 clinical scales include: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic Deviate (Pd), Masculinity/Femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma), and Social Introversion (Si). The subscale that was examined in this study is Scale 4, Psychopathic Deviate, which measures general social maladjustment and the absence of strongly pleasant experiences. Scale 4 contains 49 items and assesses conflict with family and authority figures, self-alienation, social alienation, and social imperturbability (MMPI-A Scales, 2015).

The MMPI-A was normed on 1,620 adolescents (805 males and 815 females) between the ages of 14 and 18 from several regions of the United States (Butcher & Williams, 1992). The sample from which the MMPI-A was normed was balanced for region, rural-urban residence,

and ethnicity. The MMPI-A has been validated and demonstrated in numerous studies to maintain high internal and test-retest reliability in both general and clinical samples (Cross et al., 2008; Williams & Butcher, 1989).

The MMPI-A was chosen for this study because it offers a comprehensive assessment of psychopathic deviance within a juvenile offender. The MMPI-A-RF is a restructured format of the MMPI-A that was published in 2016. Although the MMPI-A-RF is a valid instrument and can be used for adjudicated youth, it was not selected for this study based upon two key factors. The interpretive cutoff scores for the revised clinical scales on the MMPI-A-RF have been demonstrated to result in fewer within normal limits "WNL" protocols which prior research has identified as a negative factor with regard to clinical work (Stokes et al., 2018). Additionally, and more specifically related to one of the primary variables investigated in this study, the MMPI-A-RF revised clinical scale 4 was less strongly related to three of the PSY-5 scales than scale 4 on the MMPI-A (Stokes et al., 2018). The MMPI-A has also been utilized as a measure for psychopathy in juvenile offenders in prior research (Edens et al., 2001; Tecce, 2015; Vaughn & Howard, 2005). The measure was normed on an acceptably diverse sample, making it a valid measure to utilize with the anticipated sample in the current study. This study also utilized a substantial portion of retroactive data, which was already collected using the MMPI-A. The measure was suitable to administer to new participants included in the sample because it is a self-report measure that requires reading competency at a fourth-grade level and is structured using true/false responding.

Data Collection and Procedure

Initially the researcher examined the JCAP database and identified all juveniles that met criteria for inclusion in the study. Juveniles that met criteria had their data on the MMPI-A and

JOPGQ transferred into one of two new databases (non-recidivism and recidivism) and assessed for validity. Participants with invalid measures were subsequently deleted from the database. Participants referred to JCAP for assessment, who met inclusion criteria and agreed to participate in the study, were accompanied by their guardian(s) to the DJJ office building located at 550 Hawthorne Avenue, Athens, Georgia. The researcher greeted the new participants at the DJJ office and escorted them into the conference room with their guardian. The researcher then provided the participant and the guardian with consent and assent forms for participation in the study. The researcher re-iterated that participation in the study was voluntary and that participants could withdrawal from the study at any time.

The researcher discussed with the participant and guardian the length of time necessary to complete the measures included in the study (45 minutes-1 hour: MMPI-A and 15-20 minutes: JOPGQ). The researcher then inquired about any questions or concerns the participant or guardian may have before administering the psychological measures. The participant and guardian were asked to put away and silence any electronic devices and/or any possessions that may serve as a distraction. The participant and guardian were asked to sit at opposite ends of the large conference table to inhibit any unnecessary discussion between them that could alter answers provided on the given measures. The measures provided to the participant and guardian had pre-determined numbers written on the top to avoid inclusion of identifiable information and ensure confidentiality. The participant and guardian were also verbally instructed not to write their names on the measures. The guardian was provided the JOPGQ and given a brief explanation about how to fill out the measure completely. The participant was then given the MMPI-A along with a brief explanation about how to fill out the measure completely. The researcher remained in the room with the participant and the guardian in case they had any

questions and to ensure that the measures were filled out thoroughly and accurately. All of this took place in the DJJ office's conference room with only the participant, guardian, and researcher present. The conference room offered a neutral space with comfortable seating, a large table, and adequate lighting. The researcher provided all necessary materials for completion of the instruments and consent/assent forms for the participant and guardian(s).

Following completion of the measures, the researcher thanked the participant and guardian both for their participation and gathered the measures they completed. The researcher debriefed the participant and guardian about the aims of the study and provided them with contacts and referrals in the chance that either the participant or the guardian experienced any negative reaction as a result of participation in the study. The researcher again thanked the participant and guardian and inquired about any questions or concerns they had before leaving. The researcher then escorted the participant and guardian out of the conference room.

Measures for new participants were scored by the researcher and entered into the appropriate database (non-recidivism or recidivism) according to their current records in JTS. The number assigned to each participant was used as the identifier when entering in the data from the respective measures into the SPSS databases. Participants who provided invalid or incomplete measures were not included in either database. JTS, along with client files, were used to determine the type of initial offense and number of subsequent offenses each participant had engaged in and was included in the combined database.

Statistical Treatment

All data was entered and stored in the Statistical Package for the Social Sciences (SPSS). The researcher entered data for all measures into two separate databases, one for the non-recidivism group and the other for the recidivism group. Once all data had been entered and

double-checked by the researcher for accuracy, the data was combined in a third, separate, database. In the combined database, the researcher differentiated between participants in the non-recidivism and recidivism groups respectively by entering the sample as a dichotomized variable (0 = "non-recidivism" and 1= "recidivism"). The type of initial offense and number of subsequent offenses each participant had engaged in was also included in the database. In order for predictions to be made regarding recidivism through linear regressions, it was important to include continuous data for recidivism. Therefore, the outcome variable for the subsequent analyses run was severity of recidivism, which was determined by the number of offenses committed and adjudicated after the initial offense. The researcher utilized descriptive statistics analysis in order to assess for any discrepancies between the three databases and any inconsistencies were corrected.

Raw data from the MMPI-A was scored utilizing the Q-Global® web-based scoring system to improve accuracy of derived scores. Adolescents' scores on the MMPI-A were transformed to *T*-scores for comparative analyses, using normative transformation based on a sample of 1,620 adolescents ages 14-18 (Butcher & Williams, 1992). A *T*-score greater than 65 for Scale 4 (Psychopathic Deviate) was considered clinically elevated. The JOPGQ was hand scored and entered into the SPSS databases individually.

For hypothesis 1, the researcher ran a correlation to determine if exposure to violence and psychopathy demonstrate a positive relationship. For hypothesis 2, the researcher ran a linear regression to determine if greater exposure to violence will significantly predict recidivism among juvenile offenders. For hypothesis 3, the researcher ran a linear regression to determine if clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A will significantly predict recidivism among juvenile offenders. For hypothesis 4, the researcher ran a multiple

linear regression in order to determine if greater exposure to violence in combination with clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A will better predict recidivism among juvenile offenders.

Limitations

1. The current study is limited due to its reliance on self-report data provided by juveniles and their respective legal guardians
2. The current study may also have been limited in its ability to accurately assess and interpret psychopathy among juveniles within the sample that differ demographically from the norming samples of the MMPI-A
3. Threats to construct validity may be present as a result of using one instrument to measure psychopathy and exposure to violence
4. Lastly, the participants in the study were limited to juveniles referred from the Department of Juvenile Justice to receive services from JCAP doctoral students which consequently limits the diversity and generalizability of the sample

Assumptions

It is assumed that all youth and guardians of youth answered truthfully and honestly on each of the assessments and instruments administered to them by respective JCAP doctoral student researchers. It is also assumed that the administered assessments and instruments are valid, and any invalid measures have been removed from the sample.

Hypotheses

Hypothesis 1: Exposure to violence and psychopathic deviance will positively correlate

Hypothesis 2: Greater exposure to violence will significantly predict recidivism among juvenile offenders

Hypothesis 3: Clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A will significantly predict recidivism among juvenile offenders

Hypothesis 4: Greater exposure to violence and clinically elevated scores on Psychopathic Deviate (Scale 4) of the MMPI-A together will better predict recidivism among juvenile offenders than either would alone.

Chapter Four: Results

Preliminary Results

The Psychopathic Deviate Scale (Scale 4) clinical scale on the MMPI-A had a mean score of 57.85 (SD = 10.1). The Psychopathic Deviate Scale is comprised of 49 questions which divide into five Harris-Lingoes subscales. Each subscale derives a raw score that is then converted into a *T*-score (M=50, SD=10), which is used to interpret level of psychopathic deviance. The Familial Discord subscale had a mean score of 50 and a standard deviation score of 9.4, the Authority Problems subscale had a mean score of 60.8 and a standard deviation score of 9.2, the Social Imperturbability subscale had a mean score of 54.9 and a standard deviation score of 9.9, the Social Alienation subscale had a mean score of 53.4 and a standard deviation score of 10.2, and the Self-Alienation subscale had a mean score of 54.5 and a standard deviation score of 10.1. The average individual who participated in the study presented with a deficit in an area of functioning, specifically in an area associated with social maladjustment, which affects one's ability to engage in inhibition, emotional control, pro-social behavior, and empathy.

The results for the subscales on the Juvenile Offender Parent/Guardian Questionnaire (JOPGQ) are as follows: The Exasperation in Regard to the Child subscale had a mean score of 48.5 and a standard deviation score of 10.5, the Mistrust of the Justice System subscale had a mean score of 48.7 and a standard deviation score of 9.8, the Shame Over Parenting Self-Efficacy subscale had a mean score of 49.2 and a standard deviation score of 11.3, the Parental Monitoring subscale had a mean score of 47.7 and a standard deviation score of 11.3, the Fear of the Child subscale had a mean score of 49 and a standard deviation score of 9.2, and the Parent

Perception of Child's Exposure to Violence subscale had a mean score of 49 and a standard deviation score of 11.2.

Parent Perception of Child's Exposure to Violence subscale can range from 32, which suggests the youth has had limited exposure to violence, to 72, which is considered to be severe or extreme exposure to violence. *T*-scores determine the category in which an individual is classified as either clinical (*T*-Score > 60) or non-clinical (*T*-Score < 60). The mean scores for all of the subscales place the sample within the non-clinical range according to the severity classification cutoff scores informed by the JOPGQ. The score on the Parent Perception of Child's Exposure to Violence subscale suggests that the average youth who participated in the study experienced exposure to some form of trauma in his/her past, but the majority of the participants were not exposed to violence to a degree that was clinically significant in accordance with the JOPGQ cutoff scores.

The sample was comprised of adjudicated youth categorized into two groups, recidivism and non-recidivism. The sample included 207 youth with 191 of those youth qualifying for placement into the recidivism group and the remaining 16 forming the non-recidivism group. Recidivism was defined as the accumulation of subsequent convictions for delinquent acts after a juvenile is released into the community while under Department of Juvenile Justice (DJJ) supervision or after DJJ supervision. Non-recidivism was classified as youth who remained in jurisdiction but received no additional charges and had no interaction with the juvenile court and/or law enforcement during the subsequent 12 months after their initial offense. The recidivism group had a mean score of 5.1 and a standard deviation score of 2.9. The offense types included person, property, drug, and status with the most frequent offense being against another person (see Table 1).

Table 1

Descriptives Analysis of Type of Offense for Adjudicated Youth

Type of Offense	Frequency
Person	62
Property	54
Drug	42
Status	49

Hypothesis Tests

To test the hypothesis that exposure to violence and psychopathic deviance would positively correlate, a correlation was run. The variables were the Psychopathic Deviate subscale on the MMPI-A and the Parent Perception of Child's Exposure to Violence subscale on the JOPGQ. Results were not significant ($r = -.02$, $p = .74$).

To test the hypothesis that greater exposure to violence would predict severity of recidivism among juvenile offenders, a simple linear regression was done. The dependent variable was the number of offenses after initial offense. The independent variable was the *T*-Score of the Parent Perception of Child's Exposure to Violence subscale on the JOPGQ. The regression was not significant (see Table 2).

To test the hypothesis that psychopathic deviance would predict severity of recidivism among juvenile offenders, a simple linear regressions was done. The dependent variable was the number of offenses after initial offense. The independent variable was the *T*-Score of the Psychopathic Deviate subscale on the MMPI-A. Psychopathic deviance significantly predicted severity of recidivism ($F_{(1, 206)} = 39.98$, $p < .01$; 16% of variance explained). Results are reported in Table 3. Results indicated that juveniles who have more psychopathic traits tend to also have higher rates of recidivism.

To test whether a combination of greater exposure to violence and psychopathic deviance would predict severity of recidivism among juvenile offenders, a multiple regression equation was run. The regression predicted number of offenses after initial offense from a combination of the Parent Perception of Child's Exposure to Violence subscale on the JOPGQ and the Psychopathic Deviate subscale on the MMPI-A. The results were significant (see Table 4).

Table 2

Simple Linear Regression Analyses Predicting Severity of Recidivism from Parent Perception of Child's Exposure to Violence subscale

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictor	R^2	β
Parent Perception of Child's Exposure to Violence subscale	.001	.690

*p<.05 **p<.01

Table 3

Simple Linear Regression Analyses Predicting Severity of Recidivism from the Psychopathic Deviate subscale

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictor	R^2	β
Psychopathic Deviate subscale	.163	.000**

*p<.05 **p<.01

Table 4

Multiple Linear Regression Analyses Predicting Severity of Recidivism from Parent Perception of Child's Exposure to Violence and the Psychopathic Deviate subscale

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictors	R^2	β
Psychopathic Deviate subscale and Parent Perception of Child's Exposure to Violence subscale	.165	.000**

*p<.05 **p<.01

Exploratory Analysis

To determine if there would be a relationship between either the Parent Perception of Child's Exposure to Violence subscale on the JOPGQ or the Psychopathic Deviate subscale on the MMPI-A and number of offenses subsequent to initial offense, two separate correlations were run. In order to test whether there would be a relationship between exposure to violence and recidivism, a correlation was run, and the results were not significant ($r = .03$, $p = .69$). In order to test whether there would be a relationship between psychopathic deviance and recidivism, a correlation was run, and the results were significant ($r = .40$, $p < .01$). Results indicate that youth who report higher levels of traits associated with psychopathy tend to have higher rates of engagement in criminal misconduct.

To test whether any of the subscales on the JOPGQ, apart from Parent Perception of Child's Exposure to Violence, would predict severity of recidivism among juvenile offenders, five separate simple linear regressions were done. The dependent variable was the number of offenses after initial offense. The five distinct independent variables were the Exasperation in Regard to the Child, Mistrust of the Justice System, Shame Over Parenting Self-Efficacy, Parental Monitoring, and Fear of the Child subscales. None of the regressions were significant (see Table 5).

To determine whether any of the Harris Lingoes subscales which comprise the Psychopathic Deviate clinical scale on the MMPI-A would predict severity of recidivism among juvenile offenders, five separate simple linear regressions were done. The dependent variable was the number of offenses after initial offense. The five separate independent variables were the Familial Discord, Authority Problems, Social Imperturbability, Social Alienation, and Self-Alienation Harries Lingoes subscales. Familial Discord significantly predicted severity of

Table 5

Simple Linear Regression Analyses Predicting Severity of Recidivism from Exasperation in Regard to the Child, Mistrust of the Justice System, Shame Over Parenting Self-Efficacy, Parental Monitoring, and Fear of the Child subscales

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictors	R^2	β
Exasperation in Regard to the Child subscale	.000	.891
Mistrust of the Justice System subscale	.006	.263
Shame Over Parenting Self-Efficacy subscale	.000	.930
Parental Monitoring subscale	.006	.261
Fear of the Child subscale	.001	.680

*p<.05 **p<.01

recidivism ($F_{(1, 206)} = 11.39$, $p < .01$; 5% of variance explained). Authority Problems significantly predicted severity of recidivism ($F_{(1, 206)} = 6.88$, $p < .01$; 3% of variance explained). Social Alienation significantly predicted severity of recidivism ($F_{(1, 206)} = 5.47$, $p < .05$; 3% of variance explained). Self-Alienation significantly predicted severity of recidivism ($F_{(1, 206)} = 18.58$, $p < .01$; 8% of variance explained). Social Imperturbability did not significantly predicted severity of recidivism. Results are reported in Table 6. Results indicated that juveniles who experience greater familial discord, problems with authority, and higher levels of social and self-alienation tend to also continue engagement in criminal misconduct.

To test whether a combination of Harris Lingoes subscales on the MMPI-A together would predict severity of recidivism better than any of the subscales would independently, two separate multiple regressions were run. The first multiple linear regression tested whether a combination of problems with authority and familial discord would predict severity of recidivism. The overall model was significant ($F_{(2, 205)} = 9.36$, $p < .01$) and accounted for 8% of the variability in number of offenses committed subsequent to initial offense (see Table 7). The second multiple linear regression examined whether a combination of social alienation and self-alienation would predict severity of recidivism. The overall model was significant ($F_{(2, 205)} = 9.35$, $p < .01$) and accounted for 8% of the variability in severity of recidivism (see Table 8).

To determine if there was a difference between the recidivism and non-recidivism groups on severity of exposure to violence and psychopathic deviance, two separate ANOVA equations were run. The score on the Parent Perception of Child's Exposure to Violence from the JOPGQ was used to define exposure to violence and the score on Psychopathic Deviate subscale on the MMPI-A was used to define psychopathic deviance. Neither of the analyses were significant (see Table 9).

Table 6

Simple Linear Regression Analyses Predicting Severity of Recidivism from Familial Discord, Authority Problems, Social Imperturbability, Social Alienation, and Self-Alienation Harries Lingoes subscales

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictors	R^2	β
Familial Discord subscale	.053	.001**
Authority Problems subscale	.033	.009**
Social Imperturbability subscale	.005	.299
Social Alienation subscale	.026	.020*
Self-Alienation subscale	.083	.000**

*p<.05 **p<.01

Table 7

Multiple Linear Regression Analyses Predicting Severity of Recidivism from the Authority Problems and Familial Discord Harris Lingoes subscales

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictors	R^2	β
Authority Problems subscale and Familial Discord subscale	.084	.000**

*p<.05 **p<.01

Table 8

Multiple Linear Regression Analyses Predicting Severity of Recidivism from the Social Alienation and Self-Alienation Harris Lingoes subscales

	Simple Linear Regressions Dependent Variable	
	Number of Offenses After Initial Offense	
Predictors	R^2	β
Social Alienation subscale and Self-Alienation subscale	.084	.000**

*p<.05 **p<.01

Table 9

ANOVA Exploring the Differences in Mean scores for the Psychopathic Deviate subscale and the Parent Perception of Child's Exposure to Violence subscale Across Recidivism Groups

		Sum of Squares	Degrees of Freedom (df)	Mean Square	F
Psychopathic Deviate subscale and Parent	Between Groups	271.571	1	271.571	2.679
	Total	713926.000	207		
Perception of Child's Exposure to Violence subscale	Between Groups	1.132	1	1.132	.009
	Total	522878.715	207		

*p<.05 **p<.01

Figure 1

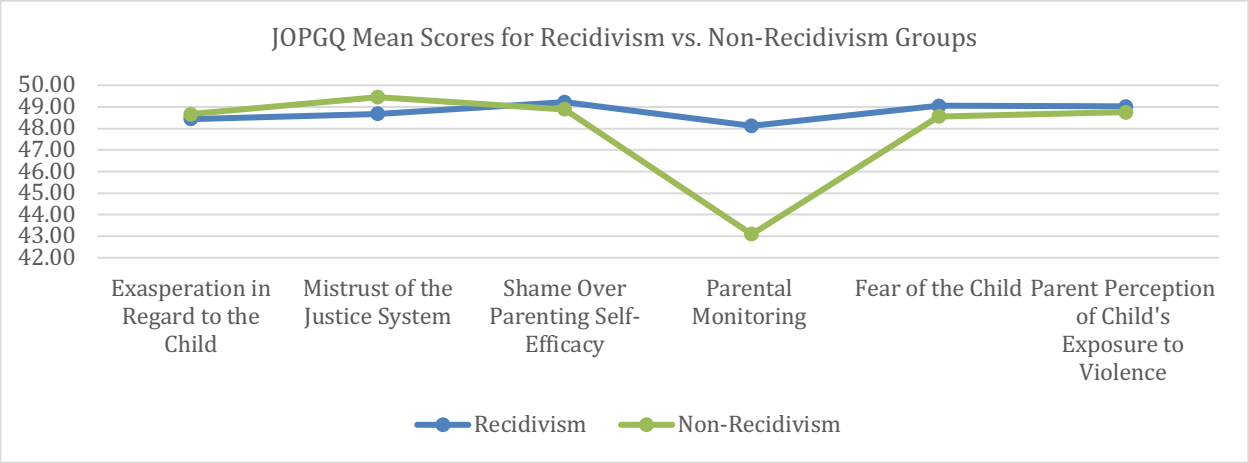


Figure 2

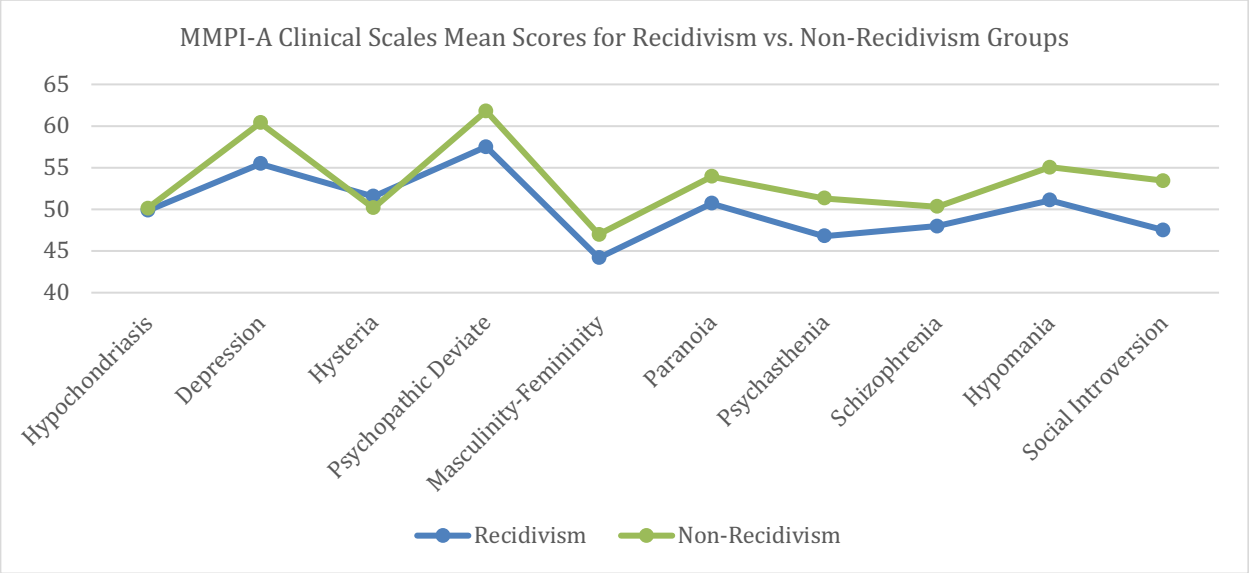
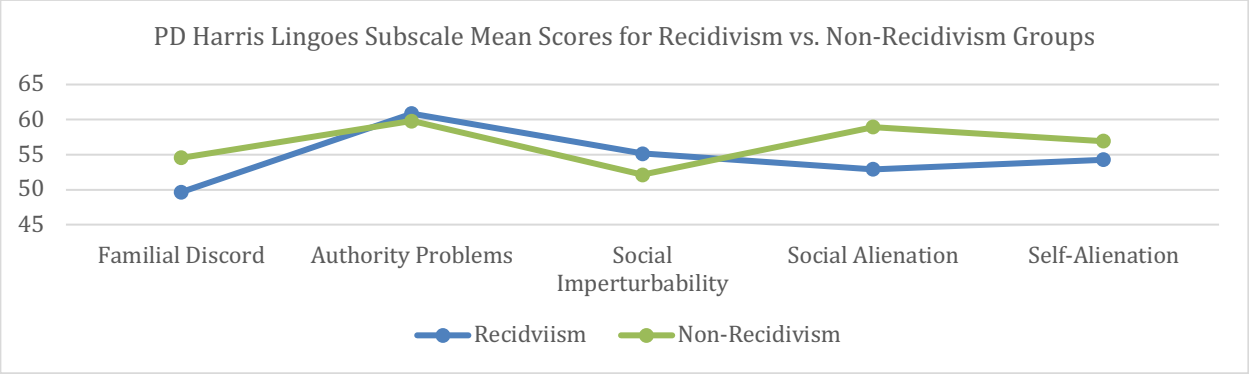


Figure 3



Chapter Five: Discussion

Statement of the Problem

The current study aimed to examine the predictive power of previously identified risk factors as they relate to the likelihood of adjudicated youths' continued engagement in criminal misconduct. The need for identification of risk factors which can be used to predict continued engagement in delinquency is essential considering the significant number of youth involved in the juvenile justice system. Another central consideration is the finding that the majority of youth currently involved in the juvenile justice system are repeat offenders. Alarmingly, the Council of State Government released a report stating that juveniles are more likely to reoffend after release across the nation, with stability of reoffending rates over an offender's lifespan (Multisystemic Therapy Institute, 2018). Prior research has demonstrated that the implementation of risk assessments are beneficial to the reduction of recidivism rates among juvenile offenders, as they allow for the employment of appropriate and effective resources that are matched to the individual youth's risk level (Vincent et al., 2014). Positive outcomes have been found through research, which support the efficacy of identifying criminogenic risk factors for youth in order to inform more effective courses of treatment (Bonta & Andrews, 2018; Cottle et al., 2001; Eisenberg et al., 2019). Although positive outcomes have been demonstrated in the literature, there remains a need for continued evaluation and modification of instruments and efforts by those involved in the juvenile justice system in order to curtail the number of youth detained and recidivism rates among the juvenile offender population.

Research has attended to the detection of risk factors for juvenile offenders, but greater focus needs to be allocated to determining which factors can best predict recidivism in order to shift the focus of treatment and rehabilitation considerations to preventative care, as opposed to reactionary. Focus should shift to better understanding which particular risk factors are most prevalent among adjudicated youth and demonstrate a link between continued engagement in criminal misconduct. This will allow for the enhancement of current risk assessment instruments' efficacy and reduce the propensity for youth to reoffend by attending to risk factors which play a more salient role in recidivism. The intention of this dissertation was to provide entities involved in the reformation of adjudicated youth with pertinent information regarding the predictive power of risk factors related to recidivism in an effort to strengthen the utility of offender treatment.

Statement of Procedures

In the current study, risk factors associated with recidivism among juvenile offenders were evaluated using the Psychopathic Deviate clinical scale on the MMPI-A and the Parent Perception of Child's Exposure to Violence subscale on the JOPGQ. This study found that 191 (92%) youth reoffended subsequent to their initial offense and 16 (8%) youth did not recidivate. This study also demonstrated that the Psychopathic Deviate clinical scale, along with the following Harris Lingoes subscales: Familial Discord, Authority Problems, Social Alienation, and Self-Alienation subscales all significantly predicted recidivism. However, the Perception of Child's Exposure to Violence subscale nor any of the other subscales on the JOPGQ significantly predicted recidivism among the sample of juvenile offenders.

Research Hypotheses

It was hypothesized that linear regressions would yield predictive relationships between recidivism and both exposure to violence and psychopathic deviance respectively, for youth involved in the juvenile justice system. Additionally, it was hypothesized that a multiple linear regression would yield a stronger predictive relationship for recidivism by combining exposure to violence and psychopathic deviance as predictors than either risk factor could yield alone.

Conclusions

The findings demonstrated by this dissertation offer support for the importance of evaluating risk factors for adjudicated youth for both officers within the juvenile justice system, as well as clinicians that provide rehabilitation-focused treatment. The results of this study highlight the necessity of identification of risk factors present for youth who are newly detained or initially become involved in the juvenile justice system. Considering that the majority of youthful offenders are repeat offenders, it is imperative that risk factors associated with engagement in reoffending are identified immediately. Identification of risk factors at the outset of involvement will allow for treatment methods to be employed which can target and effectively address identified risk factors in an effort to reduce recidivism rates and subsequently the number of youth detained or involved in the juvenile justice system. Therefore, the results of this dissertation have implications for both clinicians and those involved in the intake process for adjudicated youth. The findings produced by this study can help to improve the efficacy of the risk assessment tools utilized by various departments in the juvenile justice system and can also provide insight for administration of evaluative measures used by clinicians to guide the formulation of treatment plans.

With regard to the utility of this dissertation's results for informing effective risk assessment tools, the most noteworthy findings relate to the Harris Lingoes subscales for the Psychopathic Deviate clinical scale on the MMPI-A. This study found that four of the five Harris Lingoes subscales including: Familial Discord, Authority Problems, Social Alienation and Self-Alienation were able to significantly predict recidivism among both male and female juvenile offenders. These results suggest that particular aspects of psychopathic deviance can be used in the assessment of juvenile offenders in order to better predict their likelihood of reoffending. As a result, risk assessment instruments employed by the juvenile justice system can include more questions related to the aforementioned domains and psychopathy and provide greater specificity in understanding the potential risk level for each youth along with their particular treatment needs. Additionally, the Familial Discord and Social Alienation subscales provided the strongest predictive power for recidivism and could serve as critical components for inclusion in risk assessment instruments. Prior research has demonstrated that identification of a juvenile offender's risk level is helpful in matching them with resources that can effectively address their needs, so a more thorough assessment of the factors that contribute to their propensity to reoffend can serve to further improve the efficacy of treatments chosen, dependent upon risk level.

The specific domains of psychopathic deviance identified as viable predictors for recidivism among juvenile offenders is also helpful for informing the formulation of effective and appropriate treatment plans created by clinicians. Often treatment is provided only to the offender, but consideration should be given to the role that familial discord plays in the propensity for adolescents to reoffend. The results of this study suggest that inclusion of relevant guardians or family members could be imperative in the treatment of juvenile offenders and also

serve to lessen the likelihood of reoffending. Demonstration of the impactful role that the family environment and dynamic has on a juvenile offender's propensity to recidivate could also be seen as an incentive for the juvenile justice system to modify procedures by holding guardians more accountable for their youth's treatment outcomes by engaging more in the rehabilitative process themselves. The involvement of relevant family members in the treatment of offenders, backed by the support of the juvenile justice system, could ensure greater accountable for engagement of adolescent offenders. Allowing for family units to become more involved in the treatment process could also be beneficial in providing continuity of care and offering juveniles a greater chance for successful implementation of skills learned in treatment outside of the detention or treatment setting. This could ultimately enable lasting positive therapeutic outcomes and serve to reduce recidivism rates as well.

Relevant to both the modification of risk assessment instruments and formulation of effective treatment methods for offender is the identification of initial offense type. The literature suggest that initial offense can be used to not only predict level of risk but can also inform the severity of subsequent offenses. Risk assessment instruments and evaluations of offenders by clinicians should both include the type of initial offense in the generation of risk level assignment, identification of appropriate resources, and development of effective treatment strategies. The results of this dissertation demonstrated that the offenses against persons (62) was the highest. This suggests that future offenses are likely and will escalate in severity. The aforementioned findings could be crucial in providing effective services to juvenile offenders while simultaneously reducing recidivism rates.

Implications

The findings produced by this study imply that slight changes to current procedures, instruments, and treatment methods could be truly impactful on the reduction of recidivism rates among juvenile offenders. The literature demonstrates that the current risk assessment tools used, and treatment efforts employed by the juvenile justice system are effective, but current recidivism rates highlight the need for improvement. The results of this study suggest areas for improvement that could be informative for both employees of the juvenile justice system who are implicated in the risk assessment of juvenile offenders and those who provide subsequent treatment.

Investigation of the predictive power of exposure to violence and psychopathic deviance do not both produce statistically significant results, but they do offer suggestions for improvements of the current system used to evaluate and treat juvenile offenders. Current and standard risk assessment instruments focus on the "central eight" risk and needs factors which primarily attend to antisocial traits. However, these factors associated with psychopathy do not seem to incorporate social or self-alienation which could be critical to effective evaluation, provided the findings of this study. It is reasonable to assume that the incorporation of questions specific to social and self-alienation could provide administrators and clinicians with a more comprehensive understanding of the level of risk for reoffending posed by each juvenile. A more complete understanding of the underlying factors that contribute to the propensity to engage in reoffending could help to guide the formulation and implementation of specific treatment interventions that allow youth to avoid recidivism.

Risk assessment tools are also comprised of both static and dynamic risk factors. Static risk factors are those that denote historical features of an offender which are deemed

unchangeable. Trauma history is not changeable yet, it can be addressed with the use of appropriately informed treatment interventions which can result in modification of criminogenic thinking and subsequent behavior that could have initially been influenced by or manifested from a juvenile's exposure to trauma. Risk assessment instruments employed by the juvenile justice system should attend to trauma history more intentionally in order to produce risk assessment profiles for offenders that will better inform more effective treatment methods used by clinicians. Information derived from risk assessment instruments can also be helpful in providing resources for youth, apart from counseling, that can aid in addressing issues related to trauma in an effort to prevent juvenile offenders' future exposure to traumatic events.

The results of the study also provide incentives for the juvenile justice system and treatment providers to combine efforts in order to create more holistic treatment for offenders. Holistic in this sense would refer to involvement of family units in the treatment of offenders. As mentioned previously, the inclusion of relevant family members would be valuable for efforts to provide continuity of care and offer lasting positive treatment outcomes that inhibit engagement in recidivism. The incorporation of family members in treatment could help to address both aspects of trauma and psychopathy, which have been linked to recidivism among juvenile offenders. Inclusion of family members could allow for greater assurance that skills imparted in treatment are practiced in home and that adverse family patterns and dynamics are addressed and attended to in order to prevent engagement in cycles that lead to reoffending.

Although the pursuit of reducing recidivism rates is a large and complex undertaking, the challenge is critical to the wellbeing of our youth and community. At present, there are useful tactics and resources being employed in an effort to intervene with at-risk youth and offender populations. Transdiagnostic characteristics offer additional challenges to the creation and

employment of effective risk assessment and treatment strategies utilized by the juvenile justice system. However, continued attention devoted to research and modification of both assessments and treatment interventions can serve to enhance the efficacy of these efforts and lessen the number of youth trapped in a cycle of misconduct and detention.

Recommendations for Future Research

With consideration of the robust literature devoted to the identification of risk factors and their consequences for juvenile offenders in conjunction with the outcomes demonstrated by the findings of this study, a number of recommendations for future studies exist. A multitude of studies could provide greater clarity regarding the effect that risk factors have on the propensity for youth to recidivate and offer direction concerning risk factor analysis and employment of effective rehabilitative treatment protocols. The following proposed recommendations for future research can serve to benefit an abundance of departments and professionals who encounter adjudicated youth and ultimately the youth themselves, with hopes of contributing research that can inform more efficacious treatment and lower recidivism rates.

It was hypothesized in this study that exposure to violence would serve as a predictive risk factor for future engagement in criminal misconduct. Prior research supported the notion that exposure to violence would increase the likelihood of adolescent offenders' propensity to engage in illegal activity. The scale used to define exposure to violence in this study inquired about the adjudicated youth's guardian's perception of the juvenile's level of exposure to violence. The rationale for using this scale was the assumption that the youth's guardian would be better able to identify traumatic events and appropriately categorize the level and frequency of violence the youth had been exposed to. According to the mean score for the Perception of Child's Exposure to Violence subscale, it is reasonable to assume that the majority of adjudicated youth's

guardians underreported when considering information gathered from other data sources for a significant number of the youth involved in the study. Guardians do not always have direct access to knowledge regarding the level of exposure youth have to violence and in some cases, participants had only recently been deemed the legal guardian of the youth and may have had limited information pertaining to the youth's trauma history. Therefore, future studies could incorporate a measure of the youth's own perception of their exposure to violence independently or in combination with the guardian's perception of exposure. This could more accurately capture the level of exposure to violence adjudicated youth experience and provide a clearer understanding of how this particular risk factor could relate to psychopathy and ultimately influence recidivism.

Although the number of participants included in the sample was effective for producing reliable results, the breakdown between the number of youth in the recidivism group versus the non-recidivism group was significantly skewed. If there was an opportunity for future research to obtain a sample examining the risk factors of exposure to violence and psychopathic deviance more evenly distributed between a group of adolescents who reoffended and those who did not, it could provide some important insights into the effect these particular risk factors have on recidivism. If measures of resiliency were also incorporated into future research, there could be an opportunity to gain insight into the potential for particular resiliency factors to mediate the effect the aforementioned risk factors have on recidivism.

Another method for producing results that could shed light on both the influence of trauma on the development of psychopathic traits, as well as the relationships between the aforementioned factors and juvenile offenders' propensity for engagement in re-offending is the inclusion of a qualitative component in future research studies. A mixed methods approach

incorporating qualitative research could allow for greater specificity in understanding the contextual components that contribute to one's exposure to and experience of trauma. Anecdotal data could provide a glimpse into the experiences of the population being studied and offer insight into juveniles' perceptions of what constitutes trauma and the influence those events have had on their worldview, view of self, thought patterns, and ultimately their engagement in deviant behavior. Formulating future research with a qualitative aspect included could also help to determine other avenues or entities that could serve an essential role in providing education to juveniles and their families regarding trauma, including the forms it can take and the impact it can have on youth. Acquiring relevant information related to juveniles' experiences of trauma creates the opportunity for recommendations to be made which could help serve in the treatment of those who have become involved in the justice system and potentially allow for prevention of detainment for others through education surrounding the forms and effects of trauma.

Further, it would be beneficial for future research to focus on the effect that exposure to violence and psychopathic deviance have on recidivism along the spectrum of gender-identity. As offenders are typically placed into programs and detention centers based on the sex they were assigned at birth, it could be advantageous to tailor procedures and treatment for adjudicated youth as to provide them with the standards for best practice informed by research devoted to gender differences. A more thorough understanding of how particular risk factors influence recidivism among juveniles along the spectrum of gender-identity could positively impact treatment outcomes. Findings from research devoted to understanding risk factors as they relate to juveniles on the gender-identity spectrum could improve the efficacy of treatment modalities employed by clinicians and help to inform the juvenile justice system about the course of action

deemed most appropriate and effective for individual youth in providing rehabilitative services that will reduce engagement in recidivism.

References

Adverse Childhood Experiences (ACEs) - National Child Abuse Prevention Month - Child Welfare Information Gateway. (2020). Child Welfare Information Gateway. Retrieved from https://www.childwelfare.gov/topics/preventing/preventionmonth/resources/ace/

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Andrews, D., Bonta, J., & Wormith, J. S. (2012). Level of service/case management inventory. *PsycTESTS Dataset*. https://doi.org/10.1037/t05029-000

Archer, R. P., & Wheeler, E. M. A. (2013). *Forensic Uses of Clinical Assessment Instruments* (2nd ed.). Routledge.

Azeredo, A., Moreira, D., Figueiredo, P. & Fernando, B. (2019). Delinquent Behavior: Systemic review of genetic and environmental risk factors. *Clinical Child and Family Psychology Review, 22*, 502-526. https://doi.org/10.1007/s10567-019-00298-w

Baglivio, M., Epps, N., Swartz, K., Huq, M., & Sheer, A. (2014). The prevalence of adverse childhood experiences (ACE) in the lives of juvenile offenders. *Journal of Juvenile Justice,3*(2), 1-23. Retrieved from https://search.proquest.com/openview/7511783c06f6d72b3570b5810fb53c93/1?pq-origsite=gscholar&cbl=2031010

Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2015). The Relationship between Adverse Childhood Experiences (ACE) and Juvenile Offending Trajectories in a Juvenile Offender Sample. *Journal of Criminal Justice*, *43*(3), 229–241. https://doi.org/10.1016/j.jcrimjus.2015.04.012

Baird, C., Healy, T., Johnson, K., Bogie, A., Wicke Dankert, E., & Scharenbroch, C. (2013). Comparison of risk assessment instruments in juvenile justice. Retrieved from http://www.nccdglobal.org/sites/default/files/publication_pdf/nccd_fire_report.pdf

Baldry, A. C., & Sorrentino, A. (2017). Risk and Needs Assessment. *The Encyclopedia of Juvenile Delinquency and Justice*, 1–8. https://doi.org/10.1002/9781118524275.ejdj0110

Baskin, D., & Sommers, I. (2013). Exposure to community violence and trajectories of violent offending. *Youth Violence and Juvenile Justice,12*(4), 367-385. doi:10.1177/1541204013506920

Bauer, N. S. (2020, August 4). *ACEs – Adverse Childhood Experiences*. HealthyChildren.Org. https://www.healthychildren.org/English/healthy-living/emotional-wellness/Building-Resilience/Pages/ACEs-Adverse-Childhood-Experiences.aspx

Beckham, J. C., Feldman, M. E., Vrana, S. R., Mozley, S. L., Erkanli, A., Clancy, C. P., & Rose, J. E. (2005). Immediate antecedents of cigarette smoking in smokers with and without posttraumatic stress disorder: a preliminary study. Experimental and Clinical Psychopharmacology, 13(3), 219–228. https://doi.org/10.1037/1064-1297.13.3.219

Blair, R. J. R. (2003). Neurobiological basis of psychopathy. *British Journal of Psychiatry*, *182*(1), 5–7. https://doi.org/10.1192/bjp.182.1.5

Blair, R. J. R., Peschardt, K. S., Budhani, S., Mitchell, D. G. V., & Pine, D. S. (2006). The development of psychopathy. *Journal of Child Psychology and Psychiatry*, *47*(3–4), 262–276. https://doi.org/10.1111/j.1469-7610.2006.01596.x

Blair, R.J, (2010). Psychopath, Frustration, and Reactive Aggression: The Role of Ventromedial Prefrontal Cortex, British Journal of Psychology, 101, 383 -399.

Boggs, M., & Worthy, T. (2016). *Report of the Georgia Council on Criminal Justice Reform*. Retrieved from https://gov.georgia.gov/sites/gov.georgia.gov/files/related_files/document/GA%20Council%20on%20Criminal%20Justice%20Reform_2016%20Report_Final.pdf

Bonta, J. L., & Andrews, D. A. (2017). *The psychology of criminal conduct* (6th ed.) Anderson Publishing

Bonta, J., & Andrews, D. A. (2018). *Risk-need-responsivity model for offender assessment and rehabilitation 2007-06*. Public Safety Canada. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/rsk-nd-rspnsvty/index-en.aspx

Buckner, G. (2011). *Georgia Department of Juvenile Justice: Recidivism Report*. Department of Juvenile Justice. Retrieved from http://www.djj.state.ga.us/ResourceLibrary/_PDFfiles/RecidivismReportFY2011.pdf

Butcher, J. N., & Williams, C. L. (1992). *Essentials of MMPI-2 and MMPI-A interpretation.* Minneapolis: University of Minnesota Press.

Campbell, M. A., Porter, S., & Santor, D. (2004). Psychopathic traits in adolescent offenders: an evaluation of criminal history, clinical, and psychosocial correlates. *Behavioral Sciences & the Law,22*(1), 23-47. doi:10.1002/bsl.572

Center on the Developing Child. (2020, March 24). *Executive Function & Self-Regulation*. Center on the Developing Child at Harvard University. https://developingchild.harvard.edu/science/key-concepts/executive-function/

Champlin, K., Oldham, C., Salvatoriello, P., & Fang, Z. (2019). Juvenile Delinquency - Definition, Meaning, Examples, and Cases. Retrieved from https://legaldictionary.net/juvenile-delinquency/

Christian, E. J., Meltzer, C. L., Thede, L. L., & Kosson, D. S. (2017). The relationship between early life events, parental attachment, and psychopathic tendencies in adolescent detainees. *Child Psychiatry and Human Development, 48*(2), 260-269. https://doi.org/10.1007/s10578-016-0638-3

Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual Review of Clinical Psychology*, *1*, 409-438.

Cicchetti, D., & Toth, S. L. (2008). The past achievements and future promises of developmental psychopathology: The coming of age of a discipline. *Journal of Child Psychology and Psychiatry*, *50*, 16-25.

Conradi, H. J., Boertien, S. D., Cavus, H., & Verschuere, B. (2015). Examining psychopathy from an attachment perspective: the role of fear of rejection and abandonment. *The Journal of Forensic Psychiatry & Psychology*, *27*(1), 92–109. https://doi.org/10.1080/14789949.2015.1077264

Cook, A. K., & Gordon, J. A. (2011). Get him out of my house. *Youth Violence and Juvenile Justice,10*(2), 205-223. doi:10.1177/1541204011418352

Cottle, C., Lee, R., & Heilbrun, K. (2001). Prediction of criminal recidivism in juveniles: A meta-analysis. *Criminal Justice and Behavior, 28*(3), 367-394.

Criminal Behavior Law and Legal Definition. (2019). Retrieved from https://definitions.uslegal.com/c/criminal-behavior/

Cross, T. L., Cassady, J. C., Dixon, F. A., & Adams, C. M. (2008). The psychology of gifted adolescents as measured by the MMPI-A. *Gifted Child Quarterly,52*(4), 326-339. doi:10.1177/0016986208321810

DePrince, A. P., Weinzierl, K. M., & Combs, M. D. (2009). Executive function performance and trauma exposure in a community sample of children. Child Abuse & Neglect, 33(6), 353–361. https://doi.org/10.1016/j.chiabu.2008.08.002

Diamond, A. (2020, August 26). *Executive Functions*. PubMed Central (PMC). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4084861/

Douglas, K. S., Vincent, G. M., & Edens, J. F. (2018). *Risk for criminal recidivism: The role of psychopathy.* In C. J. Patrick (Ed.), *Handbook of psychopathy* (p. 682–709). The Guilford Press.

Durose, M., Cooper, A., & Snyder, H. (2014). *Recidivism*. National Institute of Justice. Retrieved from https://www.nij.gov/topics/corrections/recidivism/Pages/welcome.aspx

Edens, J. F., Campbell, J. S., & Weir, J. M. (2007). Youth psychopathy and criminal recidivism: A meta-analysis of the psychopathy checklist measures. *Law and Human Behavior, 31*(1), 53-75. doi:10.1007/s10979-006-9019-y

Edens, J., Skeem, J., Cruise, K., & Cauffman, E. (2001). Assessment of "juvenile psychopathy" and its association with violence: A critical review. *Behavioral Sciences and the Law*. doi:10.1002/bsl.425

Eisenberg, M. J., van Horn, J. E., Dekker, J. M., Assink, M., van der Put, C. E., Hendriks, J., & Stams, G. J. J. M. (2019). Static and dynamic predictors of general and violent criminal

offense recidivism in the forensic outpatient population: A meta-analysis. *Criminal Justice and Behavior, 46*(5), 732–750. https://doi.org/10.1177/0093854819826109

Fisher, K. A. (2020). *Antisocial Personality Disorder - StatPearls - NCBI Bookshelf*. National Center for Biotechnology Information. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK546673/

Ford, J. D., & Russo, E. (2006). Trauma-Focused, Present-Centered, Emotional Self-Regulation Approach to Integrated Treatment for Posttraumatic Stress and Addiction: Trauma Adaptive Recovery Group Education and Therapy (TARGET). *American Journal of Psychotherapy*, *60*(4), 335–355. https://doi.org/10.1176/appi.psychotherapy.2006.60.4.335

Framingham, J. (2016, July 17). Minnesota Multiphasic Personality Inventory (MMPI). Retrieved from https://psychcentral.com/lib/minnesota-multiphasic-personality-inventory-mmpi/

Freeman, R. (2013). *What is psychopathy?* Neuroinstincts | Dr. Rhonda Freeman. https://neuroinstincts.com/psychopathy/

Georgia Department of Juvenile Justice. (2016). *Annual report*. Retrieved from http://online.pubhtml5.com/howr/sakl/#p=1

Glaser, B. A., Calhoun, G. B., & Puder, R. J. (2005). Using the juvenile offender parent questionnaire (JOPGQ) as a risk and needs assessment. *Youth Violence and Juvenile Justice,10*(2), 205-223. doi:10.1177/1541204005276268

Goleman, D. (2007). Social Intelligence: The New Science of Human Relationships. Bantam Books.

Gonzalez, C. L. R., van Rootselaar, N. A., & Gibb, R. L. (2018). Sensorimotor lateralization scaffolds cognitive specialization. *Progress in Brain Research*, 405–433. https://doi.org/10.1016/bs.pbr.2018.06.011

Graham, N., Kimonis, E. R., Wasserman, A. L., & Kline, S. M. (2012). Associations among childhood abuse and psychopathy facets in male sexual offenders. *Personality Disorders: Theory, Research, and Treatment, 3*(1), 66-75. doi:10.1037/a0025605

Grunwald, H., Lockwood, B., Harris, P., & Mennis, J. (2010). Influences of neighborhood context, individual history and parenting behavior on recidivism among juvenile offenders. *J Youth Adolescence, 39*, 1067-1079. doi:10.1007/s10964-010-9518-5

Hare, R. D. (1993). *Without Conscience: The Disturbing World of the Psychopaths Among Us* (1st ed.). The Guilford Press.

Hare, R. D., & Neumann, C. S. (2009). *Psychopathy and its measurement.* In P. J. Corr & G. Matthews (Eds.), *The Cambridge handbook of personality psychology* (p. 660–686). Cambridge University Press. https://doi.org/10.1017/CBO9780511596544.041

Heirigs, Mark H., "Psychopathy, adverse childhood experiences, and antisocial behavior" (2020). *Graduate Theses and Dissertations*. 17932. https://lib.dr.iastate.edu/etd/17932

Hemphill, J. F., Hare, R. D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology, 3*(Part 1), 139–170. https://doi.org/10.1111/j.2044-8333.1998.tb00355.x

Hirstein, W. (2013). What is a Psychopath. Retrieved from https://www.psychologytoday.com/blog/mindmelding/201301/what-is-psychopath-0

Hunt, T. K. A., Slack, K. S., & Berger, L. M. (2017). Adverse childhood experiences and behavioral problems in middle childhood. *Child Abuse & Neglect*, *67*, 391–402. https://doi.org/10.1016/j.chiabu.2016.11.005

James, N. (2018, July). *Risk and Needs Assessment in the Federal Prison System* (No. R44087). Congressional Research Service. https://fas.org/sgp/crs/misc/R44087.pdf

Joseph, S. (2012). *What Is Trauma?* Retrieved from https://www.psychologytoday.com/us/blog/what-doesnt-kill-us/201201/what-is-trauma

Juvenile Justice Information Exchange. (2020). *Glossary*. Retrieved from https://jjie.org/hub/racial-ethnic-fairness/glossary/

Juvenile Justice Reform HB 242. (2014). *Georgia State University Law Review, 30*(1). Retrieved from https://readingroom.law.gsu.edu

Kerr, M., Van Zalk, M., & Stattin, H. (2012). Psychopathic traits moderate peer influence on adolescent delinquency. *Journal of Child Psychology and Psychiatry*, *53*(8), 826–835. https://doi.org/10.1111/j.1469-7610.2011.02492.x

Kiehl, K. A. (2006). A cognitive neuroscience perspective on psychopathy: Evidence for paralimbic system dysfunction. *Psychiatry Research*, *142*(2–3), 107–128. https://doi.org/10.1016/j.psychres.2005.09.013

Lagattuta, K. H., Kramer, H. J., Kennedy, K., Hjortsvang, K., Goldfarb, D., & Tashjian, S. (2015). Beyond Sally's Missing Marble. *Advances in Child Development and Behavior*, 185–217. https://doi.org/10.1016/bs.acdb.2014.11.005

Lynam, D. R., & Gudonis, L. (2005). The Development of Psychopathy. *Annual Review of Clinical Psychology*, *1*(1), 381–407. https://doi.org/10.1146/annurev.clinpsy.1.102803.144019

Majer, M., Nater, U. M., Lin, J.-M. S., Capuron, L., & Reeves, W. C. (2010). Association of childhood trauma with cognitive function in healthy adults: a pilot study. BMC Neurology, 10, 61. https://doi.org/10.1186/1471-2377-10-61

Mann, F. D., Patterson, M. W., Grotzinger, A. D., Kretsch, N., Tackett, J. L., Tucker-Drob, E. M., & Harden, K. P. (2016). Sensation seeking, peer deviance, and genetic influences on adolescent delinquency: Evidence for person-environment correlation and interaction. *Journal of Abnormal Psychology, 125*(5), 679–691. https://doi.org/10.1037/abn0000160

McLeod, S. (2017, February 5). *Attachment Theory*. Simply Psychology. https://www.simplypsychology.org/attachment.html

MMPI-A Scales. (2015). Retrieved from https://www.upress.umn.edu/test-division/mmpi-a/mmpi-a-scales

Moreira, D., Moreira, D. S., Oliveira, S., Ribeiro, F. N., Barbosa, F., Fávero, M., & Gomes, V. (2020). Relationship between adverse childhood experiences and psychopathy: A systematic review. *Aggression and Violent Behavior*, *53*, 101452. https://doi.org/10.1016/j.avb.2020.101452

Motzkin JC, Newman JP, Kiehl KA, Koenigs M. (2011). Reduced prefrontal connectivity in psychopathy. Journal of Neuroscience, November 30; 31(48): 17348–17357.

Mulder, E., Brand, E., Bullens, R., & Van Marle, H. (2010). A classification of risk factors in serious juvenile offenders and the relation between patterns of risk factors and recidivism. *Criminal Behaviour and Mental Health, 20*(1), 23-38. Retrieved from https://www.researchgate.net/profile/E_Mulder/publication/241860754_Unraveling_Seri

ous_Juvenile_Delinquency_Risk_and_needs_assessment_by_classification_into_subgroups/links/00b7d537b05d25f8db000000.pdf#page=45

Multisystemic Therapy Institute. (2018). *Do We Know the Full Extent of Juvenile Recidivism?* Juvenile Justice Reform. Retrieved from https://info.mstservices.com/blog/juvenile-recidivism-rates

National Institute of Justice. (2014). Retrieved from https://www.nij.gov/Pages/welcome.aspx

National Juvenile Defender Center. (2020). *Juvenile court terminology.* Retrieved from https://njdc.info/juvenile-court-terminology/

Neelum, A. (2011). State trends: Legislative victories from 2005 to 2010: *Removing youth from the adult criminal justice system*. Washington, DC: Campaign for Youth Justice. Retrieved from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=256079

Niles, A. D., Vignati, J., Reynolds-Cobb, S., Mantz, L., Gaultney, E., Webb, B., & Sumowski, J. (2018). Georgia Department of Juvenile Justice: Recidivism Report Update.

Office of Juvenile Justice and Delinquency Prevention. (2015). Juvenile residential facility census: Selected findings. Retrieved from http://www.ojjdp.gov/pubs/247207.pdf

Office of Juvenile Justice and Delinquency Prevention. (2015). *Status offenders.* Washington, D.C: Office of Juvenile Justice and Delinquency Prevention. Retrieved from https://www.ojjdp.gov/mpg/litreviews/Status_Offenders.pdf

Parslow, R. A., & Jorm, A. F. (2007a). Pretrauma and posttrauma neurocognitive functioning and PTSD symptoms in a community sample of young adults. The American Journal of Psychiatry, 164(3), 509–515. https://doi.org/10.1176/ajp.2007.164.3.509

Parslow, R. A., & Jorm, A. F. (2007b). Pretrauma and posttrauma neurocognitive functioning and PTSD symptoms in a community sample of young adults. The American Journal of Psychiatry, 164(3), 509–515. https://doi.org/10.1176/ajp.2007.164.3.509

Pechorro, P., Gonçalves, R. A., Maroco, J., Gama, A. P., Neves, S., & Nunes, C. (2012). Juvenile Delinquency and Psychopathic Traits. *International Journal of Offender Therapy and Comparative Criminology*, *58*(2), 174–189. https://doi.org/10.1177/0306624x12465584

Perez, N. M., Jennings, W. G., & Baglivio, M. T. (2016). A Path to Serious, Violent, Chronic Delinquency: The Harmful Aftermath of Adverse Childhood Experiences. *Crime & Delinquency*, *64*(1), 3–25. https://doi.org/10.1177/0011128716684806

Pietz, C. A., & Mattson, C. A. (2014). *Violent offenders: Understanding and assessment*. University Press; ProQuest Ebook Central. Retrieved from https://ebookcentral.proquest.com

Risk/Needs Assessment 101: Science Reveals New Tools to Manage Offenders. (2011, September). Retrieved from https://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2011/pewriskassessmentbriefpdf.pdf

Roebers, C. M. (2017). Executive function and metacognition: Towards a unifying framework of cognitive self-regulation. *Developmental Review*, *45*, 31–51. https://doi.org/10.1016/j.dr.2017.04.001

Rose, C. C., Glaser, B. A., Calhoun, G. B., & Bates, J. M. (2004). Assessing the parents of juvenile offenders: A preliminary validation study of the juvenile offender parent questionnaire. *Child & Family Behavior Therapy, 26*(1), 25-43. doi:10.1300/j019v26n01_03

Rosen, A. (2019, January 8). *What is Trauma*. The Center for Treatment of Anxiety and Mood Disorders. https://centerforanxietydisorders.com/what-is-trauma/

Salekin, R. T. (2016). Psychopathy in childhood: Toward better informing the DSM–5 and ICD-11 conduct disorder specifiers. *Personality Disorders: Theory, Research, and Treatment, 7*(2), 180-191. doi:10.1037/0000150

SAMHSA. (2017). Adverse Childhood Experiences. Retrieved from https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences

Sawyer, W. (2019). *Youth confinement: The whole pie 2019*. Prison Policy Initiative. Retrieved from https://www.prisonpolicy.org/reports/youth2019.html

Schell, A., & Dawson, M. E. (2001). Psychophysiology. In *International encyclopedia of the social & behavioral sciences* (pp. 12448–12452). essay, Elsevier.

Sevecke, K., Franke, S., Kosson, D., & Krischer, M. (2016). Emotional dysregulation and trauma predicting psychopathy dimensions in female and male juvenile offenders. *Child and Adolescent Psychiatry and Mental Health*, *10*(1), 1–13. https://doi.org/10.1186/s13034-016-0130-7

Shaffer, C., Mccuish, E., Corrado, R. R., Behnken, M. P., & Delisi, M. (2015). Psychopathy and violent misconduct in a sample of violent young offenders. *Journal of Criminal Justice*, *43*(4), 321–326. https://doi.org/10.1016/j.jcrimjus.2015.05.008

Sherin, J.E., & Nemeroff, C. B. (2011). Post-traumatic stress disorder: the neurobiological impact of psychological trauma. *Dialogues Clinical Neuroscience*. 2011;13(3):263-278.

Sickmund, M., & Puzzanchera, C. (2014). *Juvenile Offenders and Victims: 2014 National Report*. Pittsburgh, PA: National Center for Juvenile Justice. Retrieved from https://www.ojjdp.gov/ojstatbb/nr2014/

Sitney, M. H., Caldwell, B. M., & Caldwell, M. F. (2016). The longitudinal relationship between african american status, psychopathic traits, and violent recidivism in juvenile offenders. *Criminal Justice and Behavior, 43*(9), 1190-1203. doi:10.1177/0093854816645619

Snyder, B. D., & Glaser, B. A. (2014). *Scale validity: An examination for factor structure and possible clinical implications* (unpublished doctoral dissertation). University of Georgia Database.

Snyder, B. D., Glaser, B. A., & Calhoun, G. B. (2013). The Juvenile Offender Parent Questionnaire: A structural validation study. *Measurement and Evaluation in Counseling and Development, 46*(1), 38-49. https://doi.org/10/1177/0748175612467461

Somerlott, S. (2019, October 1). *Difference Between Generalized Anxiety Disorder & PTSD | Crosswinds*. Crosswinds Counseling. https://crosswindscounseling.org/blog/difference-generalized-anxiety-disorder-vs-ptsd/

Stokes, J. M., Pogge, D. L., & Archer, R. P. (2018). Comparisons between the Minnesota Multiphasic Personality Inventory-Adolescent-Restructured form (MMPI-A RF) and MMPI-A in adolescent psychiatric inpatients. *Psychological Assessment, 30*(3), 370-382. doi:10.1037/pas0000488

Tatar, J. R., Cavanagh, C., & Cauffman, E. (2016). The importance of (anti)social influence in serious juvenile offenders with psychopathic traits. *Psychology, Public Policy, and Law*, *22*(1), 92–104. https://doi.org/10.1037/law0000074

Tecce, M. P. (2015). Juvenile psychopathy: Instrumental versus reactive aggression in male and female juvenile offenders [Proquest Information & Learning]. In *Dissertation Abstracts International: Section B: The Sciences and Engineering* (Vol. 76, Issue 6-BE)).

The Pew Center on the States. (2011). (issue brief). *Risk/Needs Assessment 101: Science Reveals New Tools to Manage Offenders* (pp. 4). Washington, DC.

Torres, F. (2020). *What is Posttraumatic Stress Disorder*. American Psychiatric Association. https://www.psychiatry.org/patients-families/ptsd/what-is-ptsd

Trinidad, A., Vozmediano, L., & San-Juan, C. (2018). Environmental factors in juvenile delinquency: A systematic review of the situational perspectives' literature. *Crime Psychology Review*, *4*(1), 45–71. https://doi.org/10.1080/23744006.2019.1591693

Truancy Overview. (2016, June 21). Retrieved from https://education.findlaw.com/student-conduct-and-discipline/truancy-overview.html

Tsang, S. (2018) Troubled or traumatized youth? The relations between psychopathy, violence exposure, posttraumatic stress disorder, and antisocial behavior among juvenile offenders. *Journal of Aggression, Maltreatment & Trauma, 27*(2), 164-178. https://doi-org-proxy-remote-galib-uga.edu/10.1080/10926771.2017.1372541

Tuvblad, C., Wang, P., Bezdjjan, S., Raine, A., & Baker, L.A. (2016). Psychopathic personality development from ages 9 to 18: Genes and environment. *Development and Psychopathology, 28*(1), 27-44. https://doi-org.proxy-remote.galib.uga.edu/10.1017/S0954579415000267

Vaughn, M. G., & Howard, M. O. (2005). Self-report measures of juvenile psychopathic personality traits. *Journal of Emotional and Behavioral Disorders, 13*(3), 152-162. doi:10.1177/10634266050130030301

Vincent, G. M., Guy, L. S., Gershenson, B. G., & McCabe, P. (2014). Does risk assessment make a difference? Results of implementing the SAVRY in juvenile probation. *Behavioral Sciences & the Law, 30*(4), 384-405. doi:10.1002/bsl.2014

Waldman, I. D., Rhee, S. H., LoParo, D., & Park, Y. (2018). Genetic and environmental influences on psychopathy and antisocial behavior. In C. J. Patrick (Ed.), *Handbook of psychopathy, 2nd ed.* (pp.335-353). The Guilford Press.

Walls, J. (2014). In Georgia, Youth and Adult Lockups Have Equal Teen Felony Recidivism Rates. Retrieved from https://jjie.org/2013/03/25/in-georgia-youth-and-adult-lock-ups-have-equal-teen-felony-recidivism-rates/

Williams, C. (2006). Clinical Psychology: Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A). Retrieved from https://www.pearsonclinical.com/psychology/products/100000465/minnesota-multiphasic-personality-inventory-adolescent-mmpi-a.html

Williams, C. L., & Butcher, J. N. (1989). An MMPI study of adolescents: I. Empirical validity of the standard scales. *Psychological Assessment, 1*(4), 251-259. doi:10.1037//1040-3590.1.4.251

Wojciechowski, T. W. (2017). The role of ADHD in predicting the development of violent behavior among juvenile offenders: Participation versus frequency. *Journal of Interpersonal Violence*. doi:10.1177/0886260517734225

Wolff, K. T., & Baglivio, M. T. (2016). Adverse childhood experiences, negative emotionality, and pathways to juvenile recidivism. *Crime & Delinquency, 63*(12), 1495-1521. doi:10.1177/0011128715627469

Wolff, K. T., Baglivio, M. T., & Piquero, A. R. (2015). The relationship between adverse childhood experiences and recidivism in a sample of juvenile offenders in community-based treatment. *International Journal of Offender Therapy and Comparative Criminology, 61*(11), 1210-1242. doi:10.1177/0306624x15613992

Worling, J. R. (2001). Personality-based typology of adolescent male sexual offenders: Differences in recidivism rates, victim-selection characteristics, and personal victimization histories. *Sexual Abuse: A Journal of Research and Treatment, 13*(3), 149-166. doi:10.1177/107906320101300301

Wygant, D. B., Sellbom, M., Sleep, C. E., Wall, T. D., Applegate, K. C., Krueger, R. F., & Patrick, C. J. (2016). Examining the DSM–5 alternative personality disorder model operationalization of antisocial personality disorder and psychopathy in a male correctional sample. *Personality Disorders: Theory, Research, and Treatment, 7*(3), 229-239. doi:10.1037/0000179

Yeates, K. O., & Taylor, H. G. (2001). Neuropsychological Assessment of Children. *Handbook of Psychoeducational Assessment*, 415–450. https://doi.org/10.1016/b978-012058570-0/50016-1

Zamble, E. & Quinsey, V. L. (2001). *The Criminal Recidivism Process (Cambridge Studies in Criminology)* (1st ed.). Cambridge University Press.

Appendix A – Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

Full Names of the Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

MMPI-A Scale Abbreviation	Full Name
Validity Index VRIN	Variable Response Consistency
Validity Index TRIN	True Response Inconsistency
Validity Index F	Infrequency
Validity Index L	Lie
Validity Index K	Correction
Hs (1)	Hypochondriasis
D (2)	Depression
Hy (3)	Hysteria
Pd (4)	Psychopathic Deviate
Mf (5)	Masculinity-Femininity
Pa (6)	Paranoia
Pt (7)	Psychasthenia
Sc (8)	Schizophrenia
Ma (9)	Hypomania
Si (0)	Social Introversion
A-anx	Anxiety
A-obs	Obsessiveness
A-dep	Depression
A-hea	Health Concerns
A-aln	Alienation
A-biz	Bizarre Mentation

Full Names of the Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

MMPI-A Scale Abbreviation	Full Name
A-ang	Anger
A-cyn	Cynicism
A-con	Conduct Problems
A-lse	Low Self-Esteem
A-las	Low Aspiration
A-sod	Social Discomfort
A-fam	Family Problems
A-sch	School Problems
A-trt	Negative Treatment Indicators
A	Anxiety
R	Repression
MAC-R	MacAndrew Alcoholism Scale-Revised
ACK	Alcohol/Drug Problem Acknowledgement
PRO	Alcohol/Drug Problem Proneness
IMM	Immaturity
D1	Subjective Depression
D2	Psychomotor Retardation
D3	Physical Malfunctioning
D4	Mental Dullness
D5	Brooding
Hy1	Denial of Social Anxiety
Hy2	Need for Affection

Full Names of the Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

MMPI-A Scale Abbreviation	Full Name
Hy3	Lassitude-Malaise
Hy4	Somatic Complaints
Hy5	Inhibition of Aggression
Pd1	Familial Discord
Pd2	Authority Problems
Pd3	Social Imperturbability
Pd4	Social Alienation
Pd5	Self-Alienation
Pa1	Persecutory Ideas
Pa2	Poignancy
Pa3	Naiveté
Sc1	Social Alienation
Sc2	Emotional Alienation
Sc3	Lack of Ego Mastery, Cognitive
Sc4	Lack of Ego Mastery, Conative
Sc5	Lack of Ego Mastery, Defective Inhibition
Sc6	Bizarre Sensory Experiences
Ma1	Amorality
Ma2	Psychomotor Acceleration
Ma3	Imperturbability
Ma4	Ego Inflation

Full Names of the Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

MMPI-A Scale Abbreviation	Full Name
Si1	Shyness/Self-Consciousness
Si2	Social Avoidance
Si3	Alienation - Self and Others
A-hea1	Gastrointestinal Complaints
A-hea2	Neurological Concerns
A-hea3	General Health Concerns
A-dep1	Dysphoria
A-dep2	Self-Deprecation
A-dep3	Lack of Drive
A-dep4	Suicidal Ideation
A-aln1	Misunderstood
A-aln2	Social Isolation
A-aln3	Interpersonal Skepticism
A-biz1	Psychotic Symptomatology
A-biz2	Paranoid Ideation
A-ang1	Explosive Behavior
A-ang2	Irritability
A-cyn1	Misanthropic Beliefs
A-cyn2	Interpersonal Suspiciousness
A-con1	Acting-Out Behaviors
A-con2	Antisocial Behaviors
A-con3	Negative Peer Group Influences

Full Names of the Minnesota Multiphasic Personality Inventory – Adolescent Version (MMPI-A) Scales

MMPI-A Scale Abbreviation	Full Name
A-lse1	Self-Doubt
A-lse2	Interpersonal Submissiveness
A-las1	Low Achievement Orientation
A-las2	Lack of Initiative
A-sod1	Introversion
A-sod2	Shyness
A-fam1	Familial Discord
A-fam2	Familial Alienation
A-sch1	School Conduct Problems
A-sch2	Negative Attitudes
A-trt1	Low Motivation
A-trt2	Inability to Disclose
AGGR	Aggressiveness
PSYC	Psychoticism
DISC	Disconstraint
NEGE	Negative Emotionality/Neuroticism
INT	Introversion/Low Positive Emotionality

Appendix B – Reliability Coefficients

Internal Consistencies of the MMPI-A Content Component Scales

	Normative Sample	Clinical Sample
Scale	Boys	Boys
A-las1	0.54	0.68
A-sod2	0.60	0.65

Test Re-test Reliability Coefficients of the MMPI-A Content Component Scales

Scale	*r*
A-las1	0.57
A-sod2	0.71

Appendix C – Juvenile Offender Parent/Guardian Questionnaire

~ Parent/Guardian Questionnaire (PGQ) ~

When you are ready to begin, please read each sentence and choose an answer.
There are four possible answers for each statement:

Completely False = 1, Mostly False = 2, Mostly True = 3, and Completely True = 4.

For each item that describes a set of thoughts or feelings that you may have toward this child **now or within the past year**, please circle the number to the right of the question. For example, if a statement is **Completely True**, as applied to you, circle the **4** to the right of the question**.** Try to respond to every statement

	Completely False	Mostly False	Mostly True	Completely True
1. I have had it with my child.	1	2	3	4
2. The violence in our community has been a bad influence on my child.	1	2	3	4
3. The court system works against my child.	1	2	3	4
4. The future looks bad for my child.	1	2	3	4

5. My anger with my child is interfering with my relationship with him/her.	1	2	3	4
6. The court wants to help my child.	1	2	3	4
7. I feel like giving up on my child.	1	2	3	4
8. My child would not hurt me.	1	2	3	4
9. I still get angry when I think of the bad things that my child has done.	1	2	3	4
10. The court system treats my child poorly because of who he/she is.	1	2	3	4
11. My child listens to me.	1	2	3	4
12. I think my child could seriously hurt me.	1	2	3	4
13. It bothers me that I can't trust my own child.	1	2	3	4
14. They are out to get my child.	1	2	3	4
15. I find it stressful to raise a child with all the violence in our community.	1	2	3	4

16. The court is out to get my child.	1	2	3	4
17. When it comes to my child, I feel hopeless.	1	2	3	4
18. In spite of my child getting in trouble I know that I've been a good parent.	1	2	3	4
19. I'm afraid to turn my back on my child when he/she is angry.	1	2	3	4
20. Sometimes I wonder if my child should live someplace else.	1	2	3	4
21. My child will mess up again.	1	2	3	4
22. My child physically threatens me.	1	2	3	4
23. Sometimes I feel like a horrible person for not raising my child better.	1	2	3	4
24. The court misunderstands what it is like for my child.	1	2	3	4
25. I am angry with my child.	1	2	3	4
26. I am the one to blame when	1	2	3	4

it comes to my child.				
27. I know if my child is late coming home.	1	2	3	4
28. I understand my child.	1	2	3	4
29. I am tired of him/her getting into trouble.	1	2	3	4
30. My child keeps me informed about where he/she is going.	1	2	3	4
31. If they will leave us alone, then things will turn out okay for my child.	1	2	3	4
32. I lose my temper with my child.	1	2	3	4
33. I know the names of the kids who my child hangs out with.	1	2	3	4
34. My child lets me know when he/she will be home from school.	1	2	3	4
35. I get so angry with my child that I can't deal with him/her.	1	2	3	4
36. I stay on top of how my	1	2	3	4

child is doing in school.				
37. I think they are making too big a deal out of what my child has been accused.	1	2	3	4
38. Sometimes I am afraid of my child.	1	2	3	4
39. My child's lip (backtalk) makes me very angry.	1	2	3	4
40. I have heated arguments with my child.	1	2	3	4
41. I should have spent more time with my child.	1	2	3	4
42. My child threatens or bullies me to get what he/she wants.	1	2	3	4
43. Sometimes I feel like a prisoner in my own home because of my child.	1	2	3	4
44. I have raised my child the best way that I know how.	1	2	3	4
45. I never know what my child is doing from day to day.	1	2	3	4
46. It's my fault my child is in trouble.	1	2	3	4

47. My child just doesn't know the difference between right and wrong, and that's why they are in trouble.	1	2	3	4
48. Sometimes I think my child does things to make me angry.	1	2	3	4
49. Sometimes I get the feeling that people in the court see everyone as guilty.	1	2	3	4
50. I know the types of television shows that my child watches.	1	2	3	4
51. I will know if my child has gotten into a fight.	1	2	3	4
52. I am the inventor of the Ford automobile.	1	2	3	4
53. My child is being unfairly accused.	1	2	3	4
54. The police don't treat people like us very well.	1	2	3	4
55. My child plays for the New York Yankees.	1	2	3	4
56. I worry about the influence	1	2	3	4

of gangs on my child.				
57. I feel all alone in raising this difficult child.	1	2	3	4
58. If I make my child tell me where he/she is going, we would fight all the time.	1	2	3	4
59. My child has an attitude.	1	2	3	4
60. The probation officer cares about my child.	1	2	3	4
61. Others who know me think I am a good parent.	1	2	3	4
62. I fear that my child will physically hurt me.	1	2	3	4
63. I know how to help my child deal with his/her problems.	1	2	3	4
64. My child irritates me when he/she misbehaves.	1	2	3	4
65. The people in the court system treat my child with respect.	1	2	3	4
66. Sometimes my child explodes with anger and it scares me.	1	2	3	4

67. My child has hit me within the past year.	**1**	**2**	**3**	**4**