

JUVENILE PSYCHOPATHY AND TRAUMATIC EVENTS
AMONG INCARCERATED ADOLESCENTS

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ABSTRACT

**JEFFREY D. EDWARDS: Juvenile Psychopathy and Traumatic Events
Among Incarcerated Adolescents**

This dissertation addresses three topics related to juvenile psychopathy in order to improve social and mental health services for youth with this challenging disorder.

Chapter 2 provides an overview for practitioners who encounter youth with psychopathy in various service settings. Chapters 3 and 4 are empirical studies that use data collected from 723 youth in the Missouri Division of Youth Services treatment system in 2004.

Chapter 2 is an attempt to address the current lack of translation from research to practice in the psychopathy area. The overview is intended to provide practitioners with an up-to-date, succinct account of juvenile psychopathy. As practitioners encounter youth with psychopathy, their job becomes exponentially more difficult with the current lack of access to practice-related information regarding treatment of this subgroup of youth offenders. The overview examines research published in the past decade and addresses several topics that are currently debated in the literature: biological and social risk factors for psychopathy, assessment of psychopathy, and treatment of juvenile psychopathy. Our hope is that practitioners, armed with this knowledge, can act earlier and more effectively with youth who have psychopathy.

A topic of debate among researchers and practitioners alike is the questionability of reliable and valid assessment of psychopathy in youth. While some observers feel that

labeling psychopathic youth may be damaging, others believe that assessing youth with psychometrically sound measurement tools may provide valuable assistance in helping this subgroup of disordered youth. Chapter 3 examines the concurrent validity of a widely used tool for the assessment of psychopathy in youth: the Antisocial Process Screening Device (APSD). Results demonstrate that the APSD adequately captures antisocial behaviors characteristic of psychopathic youth, but that it may not adequately measure the affective deficits known to characterize psychopathy.

Contemporary discussions of youth psychopathy often focus on putative biological and sociological risk factors for psychopathy. The study described in Chapter 4 examines the relationship of traumatic experiences to psychopathy. More specifically, the study examines how traumatic events may lead to the maintenance of psychopathic tendencies and how features of psychopathy lead the disordered individual to experience a higher number of traumatic events. Results indicate that APSD scores and traumatic experiences are not significantly associated, whereas APSD scores and victimization experiences are significantly positively associated. The chapter then discusses these findings in more detail. The information in this dissertation contributes to psychopathy literature by providing practitioners with information on psychopathic youth, testing the concurrent validity of a widely used assessment tool, and by examining potential risk factors for psychopathy in youth.

To Ann Marie, Abby, and Eliza who have given me love,
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CHAPTER I

INTRODUCTION

“Psychopath” is a term that conjures fear, fascination, and misunderstanding in most people. The extreme nature in which the media present those with psychopathy may be to blame for what most people think of when they hear the term “psychopath.”

Psychopathy, as a disorder, is highly debated and vigorously researched. Even with all of the research and debate, this clinical construct remains a mystery. Evidence supports the notion that a subgroup of antisocial adults and children has affective deficits that together constitute a callous and unemotional temperamental disposition. How they got this way, why they are this way, and what might be done to alter their dispositions are questions that continue to mystify researchers and practitioners who encounter adults and youth with psychopathy.

Although they constitute a small percentage of youth generally, juvenile psychopaths comprise a majority of persistent and violent youth offenders and are commonly encountered in juvenile justice, mental health, substance abuse, and other service and educational settings. Further, psychopathic youth are at dramatically elevated risk for later involvement with the criminal justice system and a host of other deleterious personal and social outcomes. Currently, there is little empirically-based practical guidance available for practitioners attempting to treat an adolescent who shows signs of psychopathy.

The chapters within this dissertation examine several topics that are heavily debated by professionals who work with psychopathic youth. With potential changes to the Diagnostic and Statistical Manual of Mental Disorders, practitioners will increasingly face youth who have been formally diagnosed with signs of psychopathy. To better detect, prevent, and treat juvenile psychopathy, it is vital that practitioners enhance their knowledge about this condition and its clinical features.

Study Aims

This research aims to contribute to the knowledge-base about youth with psychopathy. Three individual studies underpin this work and are presented in Chapters 2, 3, and 4. Chapter 2 is an overview of psychopathy research written for practitioners who currently have few resources pertaining to youth with psychopathy. Chapter 3 examines the concurrent validity of one measurement tool commonly used to assess juvenile psychopathy. Chapter 4 is a study that uses multiple linear regression to characterize the relationship between traumatic experiences and juvenile psychopathy. Chapter 5 concludes the dissertation with a summary of the primary findings and implications for youth with psychopathy.

CHAPTER II

JUVENILE PSYCHOPATHY: AN OVERVIEW FOR PRACTITIONERS

Prologue

Despite decades of research devoted to psychopathy, little translation of research to practice has occurred. While disputes about the nature of psychopathy continue, scores of practitioners are faced with the challenge of working every day to help youth with psychopathy. Debates about the etiology and nature of psychopathy, assessment of psychopathy in adults and youth, treatment of individuals with psychopathy, and the potentially harmful effects of the label of psychopathy persist, but the reality remains that a small group of people, including youth, have severe affective deficits co-occurring with seriously antisocial behavior. This small group of people account for a disproportionate number of brutal crimes and murders. A recent New York Times article*, cites world renowned neuroscientist, Kent Kiehl, as estimating the national cost of psychopathy to the United States to be \$460 billion a year – with the societal costs of “nonviolent psychopaths” being even higher. Given the current nature of the scientific literature and the absence of translational works designed for practitioners, practitioners have little if any guidance for their work with psychopathic youth. Chapter 2 is meant to be a starting point for practitioners who work with individuals with psychopathy and who do not have the time, resources, or training to identify and evaluate the current scientific literature base pertaining to psychopathy.

Background

In their book, *Born to Love: Why Empathy is Essential—and Endangered*, child psychiatrists Maia Szalavitz and Bruce Perry describe the case of Ryan, 17, born to a wealthy family and stable home and possessed of a high IQ (Szalavitz & Perry, 2010). Looking like a “dream prom date, perfectly groomed, impeccably dressed, strongly built with bright blue eyes,” Ryan could not understand what he had done wrong in raping a 15-year developmentally disabled girl from his neighborhood and forcing her to “put on a show” for his friends. In fact, in a chilling display of callousness, he contended he had done her a favor, “I don’t know what the problem is, really...She never would have gotten laid by anyone as good as us” (p. 121). Prior to the rape, Ryan was known to have bullied school mates, vandalized property, and engaged in other selfish, cruel, and destructive behaviors, but had escaped serious consequences for these acts by dint of his pleasing looks, high intelligence and parents’ wealth. He had, in fact, displayed a characteristic nonchalance when questioned about these behaviors and was regarded by his peers as narcissistic, self-absorbed, and selfish.

Juvenile psychopaths are not always boys and can present with varied sociodemographic profiles and constellations of signs and symptoms, although a key defining characteristic is the absence of concern about the feelings, well-being, and rights of others. Toy and Klamen (2009), for example, describe the case of a 15-year-old girl who intentionally intimidated, physically assaulted, and stole from others, regularly broke her curfew, and evidenced no remorse for her bullying behavior or any other comorbid psychiatric problems.

Cases such as those described above compel us to ask what psychopathy is, how it is caused, and how it might best be detected, diagnosed, and treated. Each of these issues is systematically addressed below.

Definition and History of the Juvenile Psychopathy Construct

Juvenile psychopathy can be defined as a syndrome comprising a constellation of maladaptive interpersonal, affective, and behavioral traits in adolescents (Cleckley, 1941; Hare, 2003). Research spanning several decades has characterized the psychopathic personality as one that displays superficial charm, egocentricity, shallow emotions, and the absence of empathy, guilt, anxiety, and lasting relationships (Cleckley, 1976; Hare, 1970; McCord & McCord, 1964; Salekin & Lynam, 2010). Put another way, the construct of juvenile psychopathy encompasses the behavioral attributes of the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV-TR; American Psychiatric Association, 2000, 2010) diagnosis of conduct disorder (CD) with its focus on antisocial behavior, but also includes a dysfunctional emotional aspect that is not included in current formal diagnostic systems, such as the DSM-IV-TR. The dysfunctional emotional aspect is a characteristic disregard for the feelings of others, often referred to as a callous and unemotional temperamental disposition. Low or absent empathy is a cardinal feature of juvenile psychopathy.

Whereas youth diagnosed with conduct disorder constitute a comparatively large and heterogeneous group, youth with psychopathy make up a smaller, more homogenous subset of conduct-disordered individuals. Cleckley (1941) led the way in conceptualizing psychopathy with his casework identifying 16 characteristic features of psychopaths. He and the McCords (1964) were among the first scholars to raise important questions about

psychopathy, such as whether the condition exists in youth, how early in life it can be reliably identified, and to what extent the disorder is treatable (Salekin & Frick, 2005).

However, a decade after the McCords (1964) published their classic text on juvenile psychopathy, only a limited body of research in this area had accrued (Salekin & Lynam, 2010). Studies published during this time focused on psychopathic youth's nonverbal behavior, the etiological role of maternal deprivation, theoretical work on pathological stimulation seeking and genetic and environmental correlates of psychopathy (Salekin & Lynam, 2010). Several reasons for the limited utility of the juvenile psychopathy research published during this period were the wide range of measures employed to assess psychopathy, which led to incomplete and even discordant assessments of the disorder, the inconsistent and weak research designs employed, and lack of sophisticated research technology (e.g., neuroimaging). In 1990, the pace of research in this area quickened as the measurement of psychopathy in youth became more systematic due to pioneering research by Forth, Kosson, and Hare (2002) and Hare (2003). Their groundbreaking studies added new descriptive features to Cleckley's original characterization of psychopathy and showed that psychopathy could, in fact, be reliably identified in adolescents. This research made it possible for the study of juvenile psychopathy to move forward far more rapidly and systematically.

Approximately 3% to 5% of adolescents become chronic, life-long criminal offenders. Up to 60% of these youth meet current criteria for juvenile psychopathy, as reflected in their characteristically callous and unemotional personality traits, narcissism, and impulsive and antisocial lifestyles (Hare, 1996). Some data suggest that psychopaths are responsible for a disproportionate amount of all crime, especially violent

crime (Hare, 1996). A growing body of evidence indicates that psychopathy diagnosed early in life is a stable trait that predicts violent and serious offending later in life (e.g., Gretton, Hare, & Catchpole, 2004; Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007; Schmidt, McKinnon, Chattha, & Brownlee, 2006). For example, FBI reports in 1992 indicated that 44% of all murders of police officers were committed by psychopaths and other data suggest that the 20% of U.S. inmates who met criteria for psychopathy committed 50% of all serious crimes (Hare, 1993; Rutherford, Cacciola, & Alterman, 1999). At present, few interventions have been directed toward juvenile psychopaths, and treatment findings to date are discouraging. Thus, it is imperative that more be learned about the juvenile psychopath. Practitioners, who are able to identify and treat youth with psychopathy early and effectively, may contribute to a reduction in future violent crime.

This article reviews modern conceptualizations of psychopathy. Clinical descriptions of juvenile psychopathy are examined and distinguished from related conceptualizations such as conduct disorder and delinquency. Contemporary theoretical perspectives on psychopathy, approaches to the assessment and diagnosis of psychopathic features in youth, and pertinent treatment models will be examined in order to summarize the current state of knowledge in this area. Given the many deleterious consequences of psychopathy for affected adolescents, their family members, and society at large, it is important for practitioners to have an understanding of juvenile psychopathy. The goal of this review is to describe what is currently known about psychopathy for mental health practitioners who strive to work effectively with youth who have signs and symptoms of the condition.

Methods

Literature Review

The review of juvenile psychopathy presented in this chapter is based on a systematic literature search of peer-reviewed scientific journals, and relevant texts. The systematic search identified articles and other empirical studies published between 2000 and 2011. This time period was chosen to incorporate the most up-to-date work focused on juvenile psychopathy. The following databases were searched in December 2011: *PsychInfo*, *PubMed*, *Social Science Abstracts*, *Criminal Justice Abstracts*, and *Neurological, Psychological, and Psychiatric Abstracts*. Manual searches were also conducted of the reference sections of identified articles, other relevant articles, and reference sections of recent pertinent book titles. Keyword searches included the following descriptors entered singularly and in Boolean format with “and”: “juvenile,” “adolescent,” “psychopathy,” “theoretical perspectives,” “trauma,” and “traumatic experiences.” The terms “trauma” and “traumatic experiences” were included to search for articles that examined the role of these factors in the causation of juvenile psychopathy. Full-text articles were retrieved and examined for relevance and final selection. Works by major authors in the juvenile psychopathy area and their reference sections were carefully examined to ensure comprehensive coverage of juvenile psychopathy research published since 2000. A total of 64 reports addressing multi-faceted dimensions of juvenile psychopathy are reviewed in this article.

Analysis

Article abstracts were manually reviewed to ensure relevance. Information from relevant articles and texts is presented in this review by topical area. Articles selected included those that provided an explication or evaluation of modern theories of juvenile

psychopathy, measurement and assessment of psychopathic youth, and current treatments used with psychopathic youth.

Results

Results of the review are summarized below in sections specific to the assessment and diagnosis, etiology, and treatment of juvenile psychopathy.

Relationship to Existing Diagnostic Classification Systems

Although juvenile psychopathy is not included in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; APA, 2000, 2010) or the World Health Organization's *International Statistical Classification of Diseases and Related Health Problems, 10th Revision* (ICD-10; WHO, 2007), the disorder is most similar to the DSM-IV diagnosis of CD. However, the criteria for juvenile psychopathy are narrower than the diagnostic criteria for CD (Blair, Mitchell, & Blair, 2005; Loeber, Burke, & Pardini, 2009). Youth with psychopathy represent a subset of youth with CD in which traits are more severe and which include the presence of a callous disregard for the rights and feelings of other people, affective deficits, pathological narcissism and an impulsive and high risk antisocial lifestyle (Semple, 2005). Some researchers and practitioners believe that juvenile psychopathy is a unique disorder because juvenile psychopaths comprise only one-third to one-half of youth diagnosed with CD and display qualitatively unique affective deficits including low fear and low or absent empathy (Blair, Peschardt, Budhani, Mitchell, & Pine, 2006; Hare, 2003).

Currently, the Childhood Disorders and ADHD/Disruptive Behavior Disorders work groups for the DSM-5 have proposed the addition of a specifier to the diagnosis of conduct disorder based on the presence of significant callous-unemotional traits

(American Psychiatric Association, 2010). Led by Paul Frick and Terrie Moffitt, this work group is focusing on the stability, clinical significance, and predictive value of callous-unemotional traits in the subgroup of youth diagnosed with CD (see Table 1). It should be stressed that whereas most youths with juvenile psychopathy meet CD criteria, one-half to two-thirds of youth diagnosed with CD do not meet criteria for juvenile psychopathy. Callous and unemotional traits, along with pathological narcissism and impulsivity, are hallmark features of psychopathy in youth. Inclusion of this specifier in the latest version of the DSM will help encourage future research on this important disorder.

Etiology of Psychopathy

The leading contemporary etiological perspectives on psychopathy are biopsychosocial in nature, with a focus on neurological and psychological deficits and dysfunctions (Kiehl et al., 2004; Raine, 2002). Neurobiologically-oriented researchers contend that individuals may have defective brain anatomy or function, or unusually low levels of autonomic nervous system and cortical arousal. Stated another way, the individual has a structural neurological defect or functional brain deficit. A brain defect is structural, meaning that at least one physical area of the brain is abnormal. Over the last 40 years, scientists studying psychopathy have examined different areas of the brain and theorized how and why the defective area(s) in the brain led to psychopathy in youth (Draughon, 1977; Eysenck, 1975; Hare, 1970; Raine, 1993; Raine, Lencz, Bihrlé, LaCasse, & Coletti, 2000). Of eight brain areas studied, most of the neurological research on psychopathic youth has examined the amygdala and ventromedial prefrontal cortex (Blair, 2003; 2004; 2007; Blair, Mitchell, & Blair, 2005).

Table 2.1

A Proposed Callous/Unemotional Specifier to the DSM-IV Diagnosis of Conduct Disorder

1. Meets full criteria for Conduct Disorder.

2. Shows 2 or more of the following characteristics persistently over at least 12 months and in more than one relationship or setting. The clinician should consider multiple sources of information to determine the presence of these traits, such as whether the person self-reports them as being characteristic of him or herself and if they are reported by others (e.g., parents, other family members, teachers, peers) who have known the person for significant periods of time.

- *Lack of Remorse or Guilt: Does not feel bad or guilty when he/she does something wrong (except if expressing remorse when caught and/or facing punishment).*
 - *Callous-Lack of Empathy: Disregards and is unconcerned about the feelings of others.*
 - *Unconcerned about Performance: Does not show concern about poor/problematic performance at school, work, or in other important activities.*
 - *Shallow or Deficient Affect: Does not express feelings or show emotions to others, except in ways that seem shallow or superficial (e.g., emotions are not consistent with actions; can turn emotions “on” or “off” quickly) or when they are used for gain (e.g., to manipulate or intimidate others).*
-

Note. Information gathered from DSM5 online: <http://www.dsm5.org/Proposed%20Revision%20Attachments/Proposal%20for%20Callous%20and%20Unemotional%20Specifier%20of%20Conduct%20Disorder.pdf>

Part of the limbic system, the amygdala is an almond shaped region in the brain involved in memory, emotion, and fear, as well as formation and storage of memories associated with emotional events. This region is also involved in aversive conditioning, instrumental learning (LeDoux, 1998), and in the response to fearful and sad facial expressions (Blair, Coolege, & Mitchel, 2001). Many researchers agree that amygdala dysfunction is the basic neural structural deficit responsible for the development of psychopathic tendencies (Blair et al., 2005; Blair, 2007; Dadds et al., 2006; Kiehl, 2006).

Empirical evidence collected in this area has led to critically important new studies about abnormal emotion processing. For example, studies using electrodermal activity (Lorber, 2004) and functional magnetic resonance imaging (Kiehl et al., 2004) have concluded that abnormalities in the amygdala are, indeed, associated with dysfunctional emotional and semantic processing, two traits characteristic of psychopathic youth.

Located in the frontal lobe, the ventromedial prefrontal cortex is involved in the processing of risk, fear, and decision-making. Some researchers also propose that the prefrontal cortex is responsible for the pathology of psychopathy (Morgan & Lilienfeld, 2000; Soderstrom, Tullberg, & Wikkelso, 2000). However, only one study (Raine et al., 2000) examined this area of brain functioning in a sample of psychopaths, and the results were inconclusive. While it is possible that a defect in this brain region could lead to juvenile psychopathy, more research is needed for definitive conclusions about the role of the prefrontal cortex in the development of juvenile psychopathy.

Brain dysfunction can also be viewed in functional as well as structural terms. Researchers subscribing to this line of reasoning believe that brain dysfunction leads to low arousal, poor fear conditioning, lack of conscience, and decision-making deficits (Gray, 1987). Researchers also contend that impairments in the ability to process environmental stimuli, leading to a poorly developed conscience, high neuroticism, and poor social skills, can ultimately lead to psychopathy (e.g., Lykken, 1995) and to a deficiency in information processing and failure to place appropriate meaning on contextual cues which then leads to poor or decreased self-regulation (Newman, MacCoon, Vaughn, & Sadeh, 2005).

The etiology of juvenile psychopathy is complex and multifactorial at both the neurological and environmental levels, which themselves may interact in complex ways to predispose to psychopathy. With respect to neurological factors, although they are often studied separately, brain defects and brain dysfunction go hand in hand because structural deficits lead to dysfunction (Pennington, 2002). In his text, Pennington (2002) explains in detail how structure, process, and function are all separate entities, but also how they are related. Pennington's model of causation has four specific levels of behavioral development that are organized into broad categories. Etiology is made up of genetic and environmental influences that cause the pathology in question, in this case psychopathic behavior. Both are included in the etiology of psychopathy because "virtually all psychopathologies are caused by a combination of genetic and environmental factors that likely interact in the process of development to produce a psychopathology" (Pennington, 2002, p. 8). Etiological influences affect the development of the second level, specific structures (e.g., amygdala, neurons, receptors) and mechanisms based on those structures. Neuropsychology is the third level in the model and it is defined by the various integrated processes that take place within the individual's brain; moving brain functioning toward observable behavior. This level is composed of cognitions and emotional and social information processing. The last level in the model is the behavior. In this model, behavior has a feedback loop to etiology and brain development because behavior changes a child's experience, which changes the social environment's reaction to the child, which will affect the development of that child. Experience and environment can influence gene expression as well (Pennington, 2002).

Neurobiological literature in this area is often unclear about the linkage between structure and function or fails to distinguish between the two. By studying brain structure, researchers make assumptions about processes that lead to behavior. For example, Blair (2010) suggested that the dysfunctional amygdala inhibits punishment processing, reward processing, and stimulus reinforcement learning. Studies have shown that youth with psychopathy consistently show deficits in these three areas of functioning (Blair, 2007; Viding, 2004). While the causes of dysfunction in the amygdala are unknown, researchers who subscribe to this line of reasoning often link the dysfunction to the behavior without considering other developmental risk factors. Even with support from studies using functional magnetic resonance imaging (fMRI; Kiehl et al., 2001; Kosson et al., 2006; Tiihonen et al., 2000), explicit attention to the neuropsychological processes that link brain structure and behavior are missing in this perspective.

Although the evidence connecting psychopathy to neural impairments is strong, the environment also plays a role in the development of psychopathy (Vien & Beech, 2006). Social learning theories posit that conditioned responses are developed through modeling and socialization. Theoretical perspectives in this line of research have been around for as long as the neurological perspective. This perspective focuses on environmental influences, ranging from intrauterine prenatal insults such as anoxia, preeclampsia, lead poisoning (Hodgins, Kratzer, & McNeil, 2001) and exposure to drugs and alcohol (Day, Richardson, Goldschmidt, & Cornelius, 2000), to response conditioning (Eysenck, 1975), including parental disciplinary practices (DeKlyen, Speltz, & Greenberg, 1998; Ullman & Krasner, 1969), to life stressors, including trauma (Farrington & Loeber, 2000). The temporal ordering and reciprocal interrelationships of

environmental and biological factors related to psychopathy are potentially exceedingly complex. For example, genetic factors might influence the intrauterine environment in ways that predispose to juvenile psychopathy given specific triggering events in select environmental circumstances. Conversely, environmental experiences can influence gene expression via epigenetic processes. There is a multiplicity of ways in which biological and environmental processes could interact over time to influence the probability of developing juvenile psychopathy. It should be stressed here, and will be discussed below, that the association of differences in brain structure of youth with psychopathy does not imply that these youth will not respond to intervention.

Much like the neurobiological perspective, current literature from the social/environmental perspective falls short of providing a complete and adequate explanation of the development of psychopathy. While the correlation between the environmental risk factors presented above and violent and aggressive behavior has been supported, the literature does not account for the explicit causal linkage to the affective deficits or the antisocial interpersonal characteristics that youth with psychopathy display. That is, the presence of a correlation between two or more variables does not, in itself, establish that one variable causes the other. Other conditions must also be met to establish causality, such as the observation that one variable consistently precedes the other in time and can be reliably manipulated to influence an outcome of interest. For example, literature focusing on social-environmental contributors skips from social environmental etiological factors to behavior, without giving attention to brain structures and processes and the neuropsychological layer. From a social work perspective, understanding the person-in-environment relationship is important. However, an incomplete view of the

etiology of psychopathy is presented if one only studies the social and environmental risk factors at play within and around the developing individual.

At present, only a few researchers have married the two perspectives in an attempt to examine the larger etiology of psychopathy (Loeber & Stouthamer-Loeber, 1998; Lykken, 1995; Lynam, 1997; Moffitt, 1993; Paris, 1993). Although having a neurological dysfunction and/or genetic predisposition certainly puts the individual at risk for antisocial behavior, the environment in which the individual spends most of his or her time also plays an important role in the development of psychopathic traits (Blair et al., 2006; Paris, 1993). Researchers invested in this combination of perspectives have contended, “biological factors determine underlying temperamental conditions in an individual, who will develop a personality disorder under certain additional psychological and social risk factors” (Herpertz & Sass, 2000, p. 573).

Theories from this integrated perspective suggest that psychopathy is developed due to the child’s low fearfulness, which insufficiently motivates him or her to avoid punishment, while making it difficult to socialize the child using typical parenting practices; or the child’s exploratory behaviors and impulsive responses to rewards leads to conduct problems, oppositional defiant behaviors, and self-regulation problems within various societal structures like school and family. Both perspectives are needed for a more holistic view of the psychopathic youth for any hope of treatment as well. A more encompassing understanding of psychopathy, including both the neurobiological and social/environmental etiological perspectives, will help intervention science target more malleable factors of psychopathic youth.

Trauma and psychopathy. Practitioners who work with youth with psychopathic features may notice that many of these youth have histories of traumatic experiences or ongoing experiences with trauma. Numerous studies have attempted to assess the effect of traumatic experiences on brain development and on the etiology of psychiatric illness and personality disorders, including psychopathy (e.g., Bremner & Vermetten, 2001; Rauch, Shin, & Phelps, 2006; Rilling et al., 2001). However, traumatic events may play more than an etiological role in juvenile psychopathy. Given their deviant personality profiles and highly active risk-taking lifestyles, juvenile psychopaths likely experience a wide variety of traumatic events during their lives. Little is known about the nature, temporal ordering, and clinical significance of these experiences. Further, some theorists have hypothesized that callous-unemotional personality traits characteristic of psychopathy may serve to protect psychopathic youth from the negative consequences of traumatic events, paradoxically increasing the likelihood of failure to learn from adverse experiences and in desisting from criminal offending (Blair et al., 2006).

The deficient emotional responsiveness characteristic of psychopathy may explain how and why traumatic events have a different effect on psychopathic youth than on nonpsychopathic youth. Juvenile psychopaths show extreme emotional detachment and a general disinterest in and disregard for the feelings of others. Individuals with psychopathic features do not display remorse or shame, nor do they seem to experience affection or love for others (Blair et al., 2006). Probably due to their affective deficits, psychopathic youth may not experience typical effects of traumatic events, such as anxiety, fear, anger, trouble concentrating and falling asleep, bad dreams and upsetting memories of the event (Yehuda, Halligan, & Grossman, 2001).

Because psychopathic youth are prone to boredom, have low arousal and low fear and anxiety levels, are impulsive, and have poor behavioral controls, they likely seek out or bring upon themselves a greater number of traumatic events than nonpsychopathic youth. The role of affective deficits as potential buffers of dysfunctional responses to trauma is one that needs to be explored further. Blair, Mitchel, and Blair (2005) reported that consequences of traumatic experiences are buffered in individuals with psychopathy because of their lower baseline anxiety and stimulus response levels. A study by Verona, Patrick, and Joiner (2001) supported the idea that psychopathy may act as a protective factor against the effects of trauma. While traumatic experiences are correlated with some of the behavioral aspects of psychopathy, their effect on interpersonal and emotional functioning has yet to be determined. In short, practitioners need to be aware of the paradoxical effects of psychopathy; that is, exposure to more traumatic events, but possibly fewer negative psychological effects of trauma.

Given the potential importance of trauma to psychopathy, the lack of understanding of its role, and the desire of practitioners to understand and effectively treat youth with psychopathy, it is imperative that gaps in our knowledge be addressed.

Measurement and Assessment

A growing body of evidence focusing on the interpersonal and affective dimensions of psychopathy suggests that early manifestations of deception, manipulation, empathy, and guilt can be accurately measured in children as young as three (Hare, 2003; Kochanska & Aksan, 2006). However, an issue that is regularly discussed in the literature is the multitude of measurement tools used with this population, which has led to results that are difficult to integrate and generalize. Table 2.2 presents the most widely used measurement tools found in the youth psychopathy literature.

Clinical and juvenile justice workers are understandably concerned about the potentially harmful effects of labeling on youth. Appropriate application of the label of psychopathy to youth is predicated on valid and reliable measurement and use of the label to obtain needed services. Even though more studies are presently needed of juvenile psychopathy assessments, the current gold standard for measuring juvenile psychopathy is the Psychopathy Checklist: Youth Version (Forth, Kosson, & Hare, 2002). Eight tools commonly used to measure juvenile psychopathy are depicted in Table 2.2. The key is to appropriately capture the interpersonal (e.g., superficial charm, grandiosity, manipulation, and lying), affective (e.g., shallow emotions, absence of guilt, callousness and lack of empathy, etc.), and behavioral aspects (e.g., impulsivity, irresponsibility, need for excitement, using others, lack of realistic long-term goals, and delinquency) of psychopathy in adolescents (Hare, 2003).

Selecting the appropriate tool is contingent on several factors including: (a) the practice setting and type of youth population, (b) age of youth, (c) available resources, and (d) strengths and limitations of the measurement tool. Through careful measurement tool selection and by knowing the legal, ethical, and social concerns that accompany a “psychopathic” label, a substantial difference can be made in our ability to answer specific questions and continue to move toward an evidence-based treatment framework for this subgroup of adolescents.

Self-report evaluations are commonly seen as reliable and valid (Elliott, Huizinga, & Ageton, 1985; Loeber, Stouthammer-Loeber, Van Kammen, & Farrington, 1989; Vaughn & Howard, 2005b), although there is a propensity for some youth to over report trivial acts and underreport the most serious acts (Cernkovich, Giordano, & Pugh, 1985).

Table 2.2

Characteristics of Child and Adolescent Psychopathy Measures

| Measure | Informant | Age range (years) | No. of items | Scale | Factors | Cutoff points | Reliability | No. of studies with validity data |
|--------------------------------------|----------------------------|-------------------|--------------|------------|---|-------------------------|---|-----------------------------------|
| PCL:YV (Forth, Kosson, & Hare, 2002) | Skilled rater | 13+ | 20 | 0–2 | Three: interpersonal, affective, and behavioral | Approx. 30+ | $\alpha = (0.83)^a$ and interrater reliability (0.76) | 10+ |
| APSD (Frick & Hare, 2001) | Parent Teacher Youth | 4–18 | 20 | 0–2 | Two: impulsivity-conduct problems, callous-unemotional | 7+ on I/CP and 4+ on CU | $\alpha = (0.75)$ and interrater reliability (0.59) | 10+ |
| CPS (Lynam, 1997) | Parent | 12+ | 12 | Varies | Two: interpersonal-affective, behavior | None reported | $\alpha = (0.92)$ | 3 |
| YPI (Andershed, et al., 2002) | Youth | 12+ | 50 | 1–4 | Three: grandiose/manipulative, callous-unemotional, impulsive | None reported | $\alpha = (0.80)$ | 6 |
| PCS (Murrie & Cornell, 2000) | Youth | 12–18 | 20 | True-false | Three: interpersonal, affective, lifestyle | None reported | $\alpha = (0.85)$ | 4 |

| Measure | Informant | Age range (years) | No. of items | Scale | Factors | Cutoff points | Reliability | No. of studies with validity data |
|------------------------------------|------------------------|-------------------|--------------|--------|---|---------------|-------------------|-----------------------------------|
| MMPI-A (Butcher et al., 1992) | Youth | 14–18 | 350 | Varies | Three: interpersonal, affective, lifestyle | 60–64 | $\alpha = (0.83)$ | 10+ |
| NEO-PI-R (Costa & McCrae, 1985) | Skilled rater Youth | 17–89 | 240 | 1–5 | Five: emotional, interpersonal, experiential, attitudinal, and motivational | None reported | $\alpha = (0.80)$ | 10+ |
| PPI (Lilienfeld & Andrews, 1996) | Youth | 17–24 | 187 | 1–4 | Two: antisocial behavior and dysfunctional emotional-interpersonal tendencies | None reported | $\alpha = (0.80)$ | 10+ |

**Note.* PCL: YV, Psychopathy Checklist: Youth Version; APSD, Antisocial Process Screening Device; CPS, Child Psychopathy Scale; YPI, Youth Psychopathic Traits Inventory; PCS, Psychopathy Content Scale, MMPI-A, Minnesota Multiphasic Inventory – Adolescent; NEO-PI-R, Revised NEO Personality Inventory; PPI, Psychopathic Personality Inventory. Information gathered in large part from Vaughn & Howard (2005b).

^a Cronbach's alpha represents the internal consistency score of each measure.

This method of collecting data has become commonplace, leading to much of what is known about delinquency today (Esbenson & Osgood, 1999; Loeber, Farrington, Stouthamer-Loeber, Moffitt, & Caspi, 1998; Moffitt, Caspi, Dickson, Silva, & Staton, 1996). Two self-report measures that are well respected and have shown to be reliable and valid are the Self-Report of Delinquency (SRD, (Elliott, Huizinga, & Ageton, 1985) and the Psychopathic Personality Inventory (PPI, Lilienfeld & Andrews, 1996). Another assessment tool that is used often by practitioners to assess youth with psychopathic features is the Antisocial Process Screening Device (APSD, Frick & Hare, 2001). The APSD uses a structured interview format that takes approximately 10 minutes and collects data from the youth, a family member, and/or a teacher. The APSD remains the most widely used scale of psychopathic traits in children (Johnstone & Cooke, 2004).

Treatment

If a youth screens positive for psychopathy, practitioners are often uncertain how to proceed vis-à-vis treatment. This is particularly the case given that there has been a shift from a rehabilitative focus to a more punitive emphasis in recent years because of the lack of responsiveness in rehabilitation programs and high recidivism rate of adolescent psychopathic offenders. Various states have passed statutes lengthening the sentences of psychopathic youth to detention centers and requiring that they commit to inpatient psychiatric facilities after completing their incarceration. These states aim to reduce psychopathic youth's exposure to society. "Although this approach seems only to forestall inevitable offenses among those who are returned to society, there simply are not many successful models available for rehabilitating youth with psychopathy" (Fersch, 2007, p. 41). While prevention and intervention efforts should be targeted to all youth who engage in antisocial behavior, resource and cost considerations support approaches

that direct more resources to youth whose conduct is more seriously antisocial and likely to remain so into later adolescence and adulthood (Vaughn & Howard, 2005b).

Treatment issues. Evaluation of treatment modalities for children and adolescents with psychopathy has produced varied and inconclusive results. Some studies have concluded that there is neither a “cure” nor any effective treatment for psychopathy (Loving, 2002; Rice, Harris, & Cormier, 1992). Many have also contended that there are no medications that can instill empathy and that psychopaths who receive traditional talk therapy only become more adept at manipulating, deceiving, and using others (Hare & Babiak, 2006; Wong & Hare, 2005). However, other studies have suggested that psychopaths may benefit as much as others from psychological treatment, at least in terms of the effect on their behavior (Harris & Rice, 2006).

Youth with high levels of psychopathic traits may benefit from treatment if the treatment is focused on malleable aspects of psychopathy. Two potentially malleable personality traits that have received interest are empathy (Gerdes & Segal, 2011) and impulsivity (Carroll et al., 2006). Treatment programs should be designed to minimize or prevent the further development or expression of psychopathy. Callousness (e.g., lack of empathy, remorse, and guilt) may actually decrease over the course of long-term treatment, which may form the basis for improved behavior (Caldwell, McCormick, Umstead, & Van Rybroek, 2007). The implications this has for treatment are profound in that comprehensive, highly intensified and specialized treatment for even the most dysfunctional adolescent may be effective; no adolescent should be considered untreatable and removed from society forever (Frick & Viding, 2009). Although highly intensified, individualized and specialized types of treatment may be expensive at first,

the overall treatment should be viewed as cost-effective, especially if it minimizes or eliminates subsequent incarceration and violent behavior given that annual prison expenses total almost \$40,000 per inmate. In the federal system, prosecuting a criminal costs roughly \$55,000 per trial and over \$280,000 per death penalty trial (Fersch, 2007). Based on these expenses, juvenile authorities and policy makers must be educated about long-term cost savings in designing individualized programs. Thinking about psychopathy in this way could help intervention scientists generate ideas and develop programs that are individualized and specialized to target certain malleable personality characteristics, but that also work toward increasing affective responses (e.g., guilt, remorse, empathy, and possibly fear) to decrease interpersonal manipulation and violence.

Promising treatments. One program that has shown success in treating youth with psychopathy is the Mendota Juvenile Treatment Center Program in Madison, Wisconsin. The Mendota Juvenile Treatment Center (MJTC) program offers intensive mental health treatment to the most violent male adolescents held in secured correctional facilities. Primary themes of the program include helping youth accept responsibility for their behavior, teaching social skills, resolving mental health issues, and helping to build positive relationships with families. Additional information on the Mendota Center and potential resources can be found on the National Registry of Evidence-based Programs and Practices (NREPP) website. NREPP is a searchable online registry of mental health and substance abuse interventions that have been reviewed and rated by independent reviewers. The site is hosted by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (www.SAMHSA.gov).

Pharmacology and psychopathic youth. Given the potential role of biological and genetic factors in juvenile psychopathy, it is unfortunate that pharmacological approaches to treating juvenile psychopathy have been given little empirical research attention. For the most part, medication has been given to treat certain behavioral symptoms evident in psychiatric conditions (e.g., schizophrenia) that are similar to behaviors found in psychopaths (e.g., impulsivity and aggression; Minzenburg & Siever, 2006). Drugs commonly used to control aggression and impulsivity in persons with psychiatric disorders are:

- Lithium, which is associated with a decrease in impulsive aggression,
- Selective serotonin reuptake inhibitors (SSRIs), which are associated with a decrease in impulsive aggression and overt hostility and antisocial behavior,
- Divalproex sodium, which is associated with decreases in irritability and overt aggression,
- Valproic acid, which is associated with a decrease in explosiveness and mood lability, and
- Phenytoin, which is associated with a decrease in aggression.

Although many studies have been conducted to test the effectiveness of these drugs with people who have psychiatric disorders, few have directly tested their effectiveness with psychopaths (Adi et al., 2002). In most cases, using drugs as monotherapy is not recommended. Obviously, psychopharmacology is another area of research that deserves further attention. One recommendation is that practitioners who work with youth with psychopathic features work with a psychiatrist to augment social work interventions with pharmacology.

Problem areas when working with psychopathic youth. Common problems that institutions and practitioners deal with when working with psychopathic youth include the youths' low motivation to change, frequent deception and manipulation, and lack of deep or lasting emotions and interpersonal bonds (Salekin, 2010). It has been frequently noted that individuals with psychopathy do not do well in psychotherapy because they are not motivated to change. To an extent, this is true, but it does not mean that interventions are invariably ineffective with this population. Therapists often must cope with clients' lack of motivation in many different clinical contexts (e.g., substance abusing or depressed clients) and if a client's lack of motivation to change is used as a rationale to not proceed with psychotherapy, a large number of clients would be excluded from treatment. Whether treatments designed to motivate the unmotivated client (e.g., motivational enhancement therapy or brief motivational interventions) work with psychopathic youth remains to be empirically determined at this point in time. Perhaps lack of motivation in psychopathic youth is uniquely intractable; however, until further evidence supports this perspective, innovative motivational interventions should be designed and tested with psychopathic youth.

Another common belief is that psychopathic youth will deceive and manipulate their interventionists. Concern about faking improvement to impress a therapist or family member, or when attempting to gain early release from a restricted setting is not unique to psychopathic youth; however, therapists should focus on how to identify and respond to manipulation rather than worrying about whether or not it will occur. Clinicians can learn how to distinguish honest reporting of symptoms from manipulation by drawing on established literature pertaining to the detection and treatment of malingering in

correctional and clinical contexts. There has also been speculation that therapy might teach psychopathic youth social and emotional skills that increase their likelihood of committing crimes successfully (Harris, Rice, & Lalumiere, 2001). Whether social and emotional skills increase or decrease as a result of this therapy has not been confirmed (Skeem, Polaschek, & Manchak, 2009). Thus, more research directed to understanding the interaction of youth psychopathy, deception, and treatment processes and outcomes is needed.

Another treatment concern is that because psychopathic youth lack the ability to form strong attachments to others, psychotherapy will not be effective. This is a legitimate concern, but no concrete evidence for or against it currently exists. Although two hallmarks of psychopathy in youth are lack of remorse and lack of empathy, there is not much empirical evidence about the stability of these traits over the entire life course or in therapeutic situations (Salekin, 2010). That said, evidence about whether or not affective reactions can be altered in youth with psychopathy has not been produced. More attention and research is needed on affect and emotion in psychopathic youth to determine potential emotional capabilities. Research on treatment of psychopathic youth could establish which attributes are more or less malleable. Treatments designed for behaviorally disruptive youth might not be optimal for psychopathic youth. If this is the case, then developing tailored treatments specifically targeting areas of deficient functioning could prove to be helpful. Intervention research specifically dedicated to youth with psychopathy can draw on theory to determine how psychopathy is maintained during the life course.

Discussion

This review provides clinicians with a better understanding of the unique population of psychopathic youth by presenting an up-to-date account of the literature and research on juvenile psychopathy. Grounded in research and theory, the article is a guide to understanding, assessing, and treating this difficult population. Although there can be ethical and social implications for labeling youth as psychopathic, it is clear that there is a subgroup of adolescents with a markedly antisocial personality. The callous and unemotional personality traits, narcissism, and impulsive and atypical antisocial lifestyles of these youth present multiple problems for society. The social and monetary tolls psychopathic youth will continue to exact represent an important problem for which there currently are no completely satisfying answers. Although research and general interest in youth with psychopathy continue to grow, much more work is needed examining assessment and diagnostic issues, stability of psychopathic traits into adulthood, and life-course outcomes for psychopathic youth. As research continues to uncover answers about the biological and social and environmental processes that lead to the characteristics of psychopathy in youth and the sources of stability and potential changes in these features over time, the overarching goal for practitioners and researchers should be to improve the well-being of youth with psychopathy. Youth with psychopathy present unique challenges to practitioners. The knowledge base for practice is growing, but practitioners still have few, if any options for evidence-based treatment. It is important that practitioners not be guided by unsubstantiated negative assumptions about psychopathic youth, but use the existing knowledge base as fully as possible, and contribute to that knowledge base. Youth with psychopathy deserve the best social work treatment, including the full respect and commitment of practitioners.

Table 2.3

Resources for Practitioners

| Resource | Note |
|---|--|
| Books | |
| Blair, Mitchel, & Blair (2005) | This book provides a thoughtful neurobiological account of psychopathy. |
| Cleckley (1976) | This book is perhaps the pioneering text on psychopathy. It provides many clinically-based insights into the disorder as illustrated by numerous case studies. |
| Hare (1993) | This book discusses the prevalence and characteristics of psychopathy in a reader-friendly format. |
| Salekin & Lynam (2010) | This book provides a comprehensive overview of psychopathy from the history of the disorder through contemporary conceptualizations and studies. |
| Szalavitz & Perry (2010) | This book examines empathy in youth and the role it plays in human development in a series of riveting case studies. |
| Articles | |
| Frick & Viding (2009) | This article examines juvenile psychopathy from a developmental psychology perspective. |
| Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber (2007) | This article provides insight into juvenile psychopathy and the life trajectories of youth with high psychopathy scores. |
| Lynam (1997) | This article discusses conceptualizations of psychopathy and possible deleterious effects of the psychopathic label. |
| Moffitt (1993) | This article examines antisocial behavioral trajectories in youth and presents the classic distinction between several subtypes of adolescent offenders. |
| Web sites | |
| http://www.hare.org/index.html | Robert Hare’s website is devoted to the study of all things psychopathy-related. This is a rich resource. |

CHAPTER III

CONCURRENT VALIDITY OF THE ANTISOCIAL PROCESS SCREENING DEVICE IN A SAMPLE OF JUVENILE OFFENDERS

Prologue

Several measurement tools were discussed in Chapter 2, including the Antisocial Process Screening Device, Self-Report of Delinquency, and Psychopathic Personality Inventory. The reliable and valid assessment of psychopathic traits in youth is crucial for the identification and treatment of youth with severe affective deficits. Chapter 3 examines the concurrent validity of the Antisocial Process Screening Device, the most widely utilized self-report measure to assess psychopathy in youth, by comparing its scores with scores on the Self-Report of Delinquency and a modified nine-item version of the Psychopathic Personality Inventory. All three instruments utilize the self-report method of collecting data which should be more accessible and cost-efficient than other data collection methods for practitioners who lack adequate resources.

Background

Psychopathy in youth is characterized by profound interpersonal and affective deficits, including callousness, lack of guilt and empathy, and fearlessness coupled with impulsive and antisocial behavior (Patrick, 2006). Decades of research has been conducted on youth with psychopathy; the majority of these studies utilize some version of the Psychopathy Checklist – Revised (PCL-R; Hare, 1991; 2003) for assessment purposes. The PCL-R is, for better or worse, the “gold standard” for assessing multifaceted components of psychopathy with a large body of evidence supporting its

reliability and validity across diverse populations (and that of the youth version [PCL-YV] of the measure) (Hare & Neumann, 2006; Vitale, Smith, Brinkley, & Newman, 2002). However, the cost of the PCL-R (\$375 per kit), its requirements of access to sensitive criminal justice and clinical files, and the time-intensive nature of the structured interview assessment (approximately 120 minutes for each interview and an additional 60 minutes for collateral review) have limited its accessibility to many practitioners.

To address this problem, researchers have developed inexpensive and brief measurement tools to assess antisocial behavior and psychopathic traits via self-report. Self-report evaluations of antisocial behavior are generally regarded as reliable (Elliott, Huizinga, & Ageton, 1985; Loeber, Stouthammer-Loeber, Van Kammen, & Farrington, 1989, Vaughn & Howard, 2005a) although some youth are known to over-report trivial acts and under-report the most serious antisocial behavior (Cernkovich, Giordano, & Pugh, 1985). Self-report assessment of antisocial behavior (one facet of psychopathy) has become commonplace, contributing to much of what is known about delinquency today (Esbenson & Osgood, 1999; Loeber, Farrington, Stouthamer-Loeber, Moffitt, & Caspi, 1998; Moffitt, Caspi, Dickson, Silva, & Staton, 1996). Given the accessibility of the assessments and the number of researchers using self-report measures, the validity of such measures is a key concern. A concern often raised with regard to the validity of psychopathy tools is that psychopathic individuals may “fake good” during the assessment. For a comparative review of self-report measures of juvenile psychopathic personality traits, see Vaughn and Howard’s (2005b) measurement article.

A positive association between psychopathy and violence has been established in prior studies (Hemphill, Hare, & Wong, 1998; Moffitt, 1993; Salekin, Rogers, & Sewell,

1996; Vaughn & Howard, 2005a). Self-report measures of psychopathy have been used to successfully predict future criminal activity and violence in the community and within correctional facilities. Researchers have speculated that the impulsivity and low empathy characteristics of psychopathy may predispose afflicted individuals to violent offending. These speculations and supportive scientific evidence, have led to the creation of a variety of measures purportedly assessing behavioral and affective features of psychopathy. While debate continues regarding the origins of psychopathy in youth and how best to assess it, it is critical that such efforts be undertaken so that prevention and intervention resources are focused on early identification of individuals with psychopathic features who are likely to commit antisocial acts in the future.

The Current Study

This study examined the concurrent validity of the self-report version of the twenty-item Antisocial Process Screening Device (APSD; Frick & Hare, 2001), a measure often used to assess psychopathy in youth (Vaughn & Howard, 2005b). APSD scores were examined in relation to scores on the Self-Report of Delinquency (SRD), a measure of frequency of violent and non-violent antisocial behavior in the previous year and on a nine-item modified Psychopathic Personality Inventory – Short Version (mPPI-SV), a self-report measure of affective deficits derived from the full-scale PPI (Poythress, Edens, & Lilienfeld, 1998).

The current study tested the hypothesis that individuals who scored high (i.e., 1 standard deviation [SD] above the mean) on the SRD and high [1 SD above the mean] on the mPPI-SV affective scale would have significantly higher APSD scores than respondents who score low [1 SD below the mean] on these measures. That is, that respondents high in psychopathy as assessed by the APSD would show significantly

higher levels of antisocial behavior and callous/unemotional traits as assessed by the SRD and mPPI-SV compared to youth with low APSD scores (low psychopathy).

Methods

Description of Dataset

The data were collected in 2004 by Matthew Howard (PI) primarily to study adolescent inhalant abuse. The sample consisted of 723 youth committed to residential treatment for delinquent acts ranging from misdemeanors and other juvenile offenses to serious felonies. Residential rehabilitation is provided by the Missouri Division of Youth Services (DYS) at 27 facilities statewide. Facilities ranged in size from eight to 102 beds, with an average of 27 beds per facility. DYS is the legal guardian of residents aged 13-17 committed to its care by the Missouri juvenile court system. DYS was established to provide mandated state services including assessment, care, treatment and education to all youth committed to its care.

Sample

This DYS sample is representative of incarcerated youth nationally with regard to gender, age and number of youth incarcerated per 100,000 adolescents (Sickmund, 2004). The mean age of the study sample was 15.5 (SD = 1.2) and ages ranged from 11 to 20. In terms of gender and ethnicity, the sample was largely male (87%) and predominately Caucasian (55.3%) and African American (32.9%). See Table 3.1 for a detailed description of this sample.

All DYS residents (N = 740) were eligible to participate in the study. Due to attrition, 723 youth completed the interview representing 97.7% of DYS residents at the time interviewing was conducted, 99.3% of residents available for interviewing, and approximately 55.0% of youth committed to DYS guardianship in the prior year. The

study sample was virtually a census of the population of DYS residents at the time the study commenced and a large, representative sample of DYS annual residents.

Data Collection

Youth were given a \$10.00 stipend for completing the interview. The assent form and interview protocol provided detailed information about the study to each participant. All youth were assured they were not required to participate in the study and that they could quit at any time during the interview. Youth were also assured that their legal status would not be affected by their participation or nonparticipation in the study. The sample recruitment protocol ensured that no youths who had completed the interview at one facility attempted to complete or were successful in completing the interview at another facility. As legal guardian of all youth, DYS provided formal consent for youth to participate in the study. Fifteen graduate social work students who had previously completed an intensive one-day training session conducted confidential, one-on-one

Table 3.1

Characteristics of Study Sample (N = 723)

| | Frequency | % |
|----------------------------------|-----------|------|
| Gender | | |
| Male | 629 | 87.0 |
| Female | 94 | 13.0 |
| Age | | |
| 11 | 3 | .4 |
| 12 | 6 | .8 |
| 13 | 41 | 5.7 |
| 14 | 79 | 10.9 |
| 15 | 194 | 26.8 |
| 16 | 278 | 38.5 |
| 17 | 109 | 15.1 |
| 18 | 5 | .7 |
| 19 | 3 | .4 |
| 20 | 5 | .7 |
| Ethnicity | | |
| African American | 238 | 33.0 |
| White | 400 | 55.3 |
| Latino | 28 | 3.9 |
| Biracial | 45 | 6.2 |
| Other | 11 | 1.6 |
| Current grade in school | | |
| 5 | 1 | 0.1 |
| 6 | 18 | 2.5 |
| 7 | 52 | 7.2 |
| 8 | 97 | 13.4 |
| 9 | 233 | 32.3 |
| 10 | 211 | 29.3 |
| 11 | 76 | 10.5 |
| 12 | 33 | 4.7 |
| Geographic residence | | |
| City | 283 | 39.1 |
| Suburban | 100 | 13.8 |
| Small Town | 286 | 39.6 |
| Rural | 54 | 7.5 |
| Family receipt of welfare | | |
| No | 430 | 59.5 |

| | Frequency | % |
|----------------------------|-----------|------|
| Yes | 293 | 40.5 |
| English (primary language) | | |
| No | 17 | 2.4 |
| Yes | 706 | 97.6 |

interviews in private areas within each facility. To minimize interviewer errors, an interview editor was also present at each facility during the interviews. The entire interview process was completed over a 3-month period. Youth were allowed breaks during the 30 to 90 minute interview session if they became fatigued, although they were constantly monitored by project staff consistent with DYS policy.

All study protocols and informed assent/consent forms were approved by the Missouri DYS IRB, Washington University Human Studies Committee IRB (operating in accordance with the governing regulations for research on prisoners), and the project was officially certified by the federal Office of Human Research Protection, and was granted a Certificate of Confidentiality by the National Institute on Drug Abuse. All youth received a description of their privacy rights and a copy of the informed assent agreement.

Measures

All youth completed the Self-Report of Delinquency (SRD; Elliott, Huizinga, & Ageton, 1985), which assesses frequency of antisocial acts committed by youth in the year immediately prior to their incarceration. Another measure, a modified nine-item Psychopathic Personality Inventory (Lilienfeld & Andrews, 1996) Short-Version (mPPI-SV) scale was used to gain information about personality traits reflecting callousness, unemotionality, or cold heartedness. The Antisocial Process Screening Device (APSD) was used to assess psychopathic features in youth (Frick & Hare, 2001). All of these instruments were completed as self-report questionnaires, although interviewers were available to answer questions as needed.

Delinquent Behavior

SRD. The SRD was designed to assess the type and frequency of violent and nonviolent delinquent acts committed in the year prior to incarceration. Elliott and colleagues (1985) modeled the SRD after the survey used in the National Youth Survey (Elliott, Huizinga, & Menard, 1989) to collect data “representative of the full range of acts for which juveniles could be arrested” (pp. 97-98). Questions assess frequency of property/non-violent offending and frequency of violent offending. The response format for items ranges from: (0) Never, (1) Once or twice a year, (2) Once every 2-3 months, (3) Once a month, (4) Once every 2-3 weeks, (5) Once a week, (6) 2-3 times a week, (7) Once a day, to (8) 2-3 times a day. Total scale scores can range from 0 to 136. The SRD is a well-established research measure and has been widely used for decades. The internal consistency of the SRD in this study was acceptable ($\alpha = .84$) using Nunnally’s (1978) criterion of .70. Items included in this study are listed in Appendix A.

Affective Deficits

mPPI-SV. A modified 56-item Psychopathic Personality Inventory (Vaughn, Howard, & DeLisi, 2008) Short-Version was used to gather information on psychopathic traits. The mPPI-SV is based directly on and is highly correlated ($r = 0.90$) with the 187-item PPI (Lilienfeld & Andrews, 1996), which has shown good reliability and utility as a self-report measure assessing psychopathic personality. A typical item on the PPI is: “I sometimes try to get others to “bend the rules” for me if I can’t change them any other way.” A high score on the PPI indicates a psychopathic personality. The response format for mPPI-SV items is: (1) false, (2) mostly false, (3) mostly true, and (4) true. The PPI is considered a “pure” personality inventory of psychopathy because it contains no items directly assessing antisocial or criminal behaviors (Vaughn, Howard, & DeLisi, 2008).

Affective items included in this study were drawn from the Fearless Dominance/Callous-Unemotionality factor of the PPI (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). The nine-item affective scale represents items from three subscales: social influence, fearlessness, and stress immunity. Internal consistencies for the total PPI across many samples have ranged from 0.90 to 0.93 and 0.70 to 0.89 for the subscales (Lilienfeld & Andrews, 1996; Poythress, Edens, & Lilienfeld, 1998). In terms of validity, Poythress and colleagues (1998) also found the PPI to be a valid measure of psychopathy in the assessment of callous/unemotionality in youth. The internal consistency for the nine-item mPPI-SV in this study was acceptable ($\alpha = .76$) using Nunnally's (1978) criterion of .70. The CU items are listed in Appendix B.

Psychopathy

APSD. Frick and Hare (2001) developed the APSD for use with youth, modeling it after Hare's PCL (1991). The APSD requires approximately 10 minutes to complete. It remains the most widely used measure of psychopathic traits in children and adolescents (Johnstone & Cooke, 2004). A typical item is: "You do risky or dangerous things." High scores on the APSD indicate higher levels of antisocial behaviors. It consists of 20 items rated on a 3-point scale: (0) Not at all true, (1) Sometimes true, (2) Definitely true. Factor analyses have shown the APSD to be comprised of three factors: narcissism, impulsivity, and callous-unemotional traits (Frick, Bodin, & Barry, 2000). There is no established threshold score on the APSD used to classify youth with psychopathy (Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999). However, some studies have used a score of 20, one-half of the maximum score of 40 (Finger, Marsh, Mitchell, Reid, Sims, Budhani, et al., 2008; Marsh, Finger, Mitchell, Reid, Sims, Kosson, et al., 2008; Marsh, Finger, Schechter, Jurkowitz, Reid, & Blair, 2010). The internal consistency of the APSD in this

study was satisfactory ($\alpha = .71$) using Nunnally's (1978) criterion of .70. Items comprising the APSD are listed in Appendix C.

Results

Respondents on the SRD, nine-item mPPI-SV, and APSD were divided into groups consisting of youth who scored high, medium, or low on each measure. A score was deemed "high" for these measures if it fell one standard deviation (SD) or more above the mean for that measure because 1) cut points for these measures have not been established in the literature, 2) scores on the measures were approximately normally distributed, and 3) this method allowed each subgroup to have an adequate sample size. Conversely, a score was deemed "low" if it fell one SD or lower than the mean. Scores falling within one standard deviation of the mean were placed in the "medium" group for each measure. See Table 3.2 for the distribution of cases across these groups.

After high, medium, and low scoring groups were established for the APSD, SRD and the mPPI-SV respectively, cross-tabulations and chi-square tests were performed to evaluate associations of group membership based on the SRD and the mPPI-SV with APSD scores. Analyzing the measures in this way reveals the associations between scores on the different measures. Surprisingly, a 3x3 chi-square test of the mPPI-SV (high, medium, and low scoring groups) and the APSD (high, medium, and low scoring groups) was nonsignificant ($p = .72$). However, upon closer examination, the nonsignificant result makes sense and it will be addressed in the discussion section. As expected, a 3x3 chi-square test of the SRD (high, medium, and low scoring groups) and the APSD (high, medium, and low scoring groups) was significant ($p = .000$). The associations will be more fully discussed in the discussion section.

Table 3.3 illustrates the intercorrelations between the continuous SRD, APSD, mPPI-SV, and nine-item mPPI-SV scales and APSD and mPPI-SV subscales. Findings indicate that the SRD and the ASPD were significantly positively correlated ($r = .289$, $p = .000$), but that the mPPI-SV was not significantly associated with the APSD ($r = -.058$, $p = .120$). The correlation between the SRD and mPPI-SV was nonsignificant ($r = .010$,

Table 3.2

Mean scores and group Ns for high, medium, and low scoring groups on the Self-Report of Delinquency (SRD) and modified nine-item Psychopathic Personality Inventory – Short Version (mPPI-SV) and Antisocial Process Screening Device (APSD) (N = 723)

| | <i>N</i> | <i>M</i> | (<i>SD</i>) | Cumulative % |
|------------------------|------------|-------------|---------------|--------------|
| SRD | | | | |
| High | 115 | 59.5 | (14.6) | 15.9 |
| Medium | 491 | 32.0 | (17.3) | 67.9 |
| Low | 117 | 10.6 | (8.6) | 16.2 |
| Total | 723 | 28.0 | (20.3) | 100.0 |
| Modified PPI-SV | | | | |
| High | 126 | 28.8 | (7.6) | 17.4 |
| Medium | 498 | 23.7 | (4.9) | 68.9 |
| Low | 99 | 14.4 | (7.2) | 13.7 |
| Total | 723 | 21.7 | (5.0) | 100.0 |
| APSD | | | | |
| High | 102 | 27.5 | (2.4) | 14.1 |
| Medium | 477 | 18.1 | (6.0) | 66.0 |
| Low | 144 | 9.6 | (2.1) | 19.9 |
| Total | 723 | 18.1 | (6.0) | 100.0 |

Table 3.3

Correlation Matrix for SRD, mPPI-SV, and APSD total scale scores, nine-item mPPI-SV scale score, and APSD and mPPI-SV subscales (N = 723)

Part 1

| | | SRD | 9-item mPPI-SV | Total mPPI-SV | Machiavellians egocentricity ^y | Social potency ^y | Coldheart- edness ^y | Carefree nonplanfulness ^y |
|---|------------------------|-----|-------------------|------------------|--|--------------------------------|-----------------------------------|---|
| SRD | Pearson Correlation | — | .010 | .214*** | .281** | .027 | -.034 | .073* |
| | Sig. (2-tailed) | | .796 | .000 | .002 | .474 | .363 | .049 |
| 9-item mPPI-SV | Pearson Correlation | | — | .347*** | -.115** | .332*** | .678*** | .013 |
| | Sig. (2-tailed) | | | .000 | .002 | .000 | .000 | .736 |
| Total mPPI-SV | Pearson Correlation | | | — | .464*** | .296*** | .295*** | .391*** |
| | Sig. (2-tailed) | | | | .000 | .000 | .000 | .000 |
| Machievellian Egocentricity ^y | Pearson Correlation | | | | — | -.183*** | -.158*** | .278*** |
| | Sig. (2-tailed) | | | | | .000 | .000 | .000 |
| Social Potency ^y | Pearson Correlation | | | | | — | .203*** | -.195*** |
| | Sig. (2-tailed) | | | | | | .000 | .000 |
| Coldheart-edness ^y | Pearson Correlation | | | | | | — | .180*** |
| | Sig. (2-tailed) | | | | | | | .000 |
| Carefree Nonplanfulness ^y | Pearson Correlation | | | | | | | — |
| | Sig. (2-tailed) | | | | | | | |

Part 2

| | | Fearlessness ^y | Blame externalization ^y | Impulsive nonconformity ^y | Stress immunity ^y | Total APSD | Narcissism ^t | Impulsivity ^y | C/U ^t |
|---|-----------------|---------------------------|---------------------------------------|---|---------------------------------|---------------|-------------------------|--------------------------|------------------|
| SRD | Pearson | | | | | | | | |
| | Correlation | .052 | .215*** | .149*** | .095* | .289*** | .231*** | .222*** | .254*** |
| | Sig. (2-tailed) | .160 | .000 | .000 | .011 | .000 | .000 | .000 | .000 |
| 9-item mPPI-SV | Pearson | | | | | | | | |
| | Correlation | -.078* | -.231*** | -.017 | .563*** | -.058 | -.175*** | -.103** | .048 |
| | Sig. (2-tailed) | .036 | .000 | .646 | .000 | .120 | .000 | .006 | .199 |
| Total mPPI-SV | Pearson | | | | | | | | |
| | Correlation | .538*** | .366*** | .611*** | .192*** | .430*** | .194*** | .373*** | .414*** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| Machie-vellian Ego-centricity ^y | Pearson | | | | | | | | |
| | Correlation | .167*** | .357*** | .327*** | -.341*** | .653*** | .612*** | .428*** | .581*** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| Social Potency ^y | Pearson | | | | | | | | |
| | Correlation | .006 | -.226*** | -.071 | .397*** | -.219*** | -.222*** | -.156*** | -.178*** |
| | Sig. (2-tailed) | .876 | .000 | .055 | .000 | .000 | .000 | .000 | .000 |
| Coldheart-edness ^y | Pearson | | | | | | | | |
| | Correlation | -.183*** | -.293*** | -.113** | .357*** | .014 | -.112** | -.055 | .114** |
| | Sig. (2-tailed) | .000 | .000 | .002 | .000 | .707 | .002 | .137 | .002 |
| Carefree Nonplan-fulness ^y | Pearson | | | | | | | | |
| | Correlation | .074* | .073* | .203*** | -.286*** | .494*** | .252*** | .469*** | .435*** |
| | Sig. (2-tailed) | .046 | .05 | .000 | .000 | .000 | .000 | .000 | .000 |

Part 3

| | | Fearlessness ^y | Blame externalization ^y | Impulsive nonconformity ^y | Stress immunity ^y | Total APSD | Narcissism ^t | Impulsivity ^t | C/U ^t |
|-------------------------|---------------------|---------------------------|------------------------------------|--------------------------------------|------------------------------|------------|-------------------------|--------------------------|------------------|
| Fearlessness | Pearson Correlation | — | .143*** | .368*** | -.029 | .166*** | .056 | .229*** | .109** |
| | Sig. (2-tailed) | | .000 | .000 | .439 | .000 | .134 | .000 | .003 |
| Blame Externalization | Pearson Correlation | | — | .345*** | -.332*** | .309*** | .273*** | .265*** | .238*** |
| | Sig. (2-tailed) | | | .000 | .000 | .000 | .000 | .000 | .000 |
| Impulsive Nonconformity | Pearson Correlation | | | — | -.132*** | .328*** | .179*** | .316*** | .281*** |
| | Sig. (2-tailed) | | | | .000 | .000 | .000 | .000 | .000 |
| Stress Immunity | Pearson Correlation | | | | — | -.383*** | -.435*** | -.317*** | -.261*** |
| | Sig. (2-tailed) | | | | | .000 | .000 | .000 | .000 |
| Total APSD | Pearson Correlation | | | | | — | .725*** | .780*** | .900*** |
| | Sig. (2-tailed) | | | | | | .000 | .000 | .000 |
| Narcissism | Pearson Correlation | | | | | | — | .413*** | .543*** |
| | Sig. (2-tailed) | | | | | | | .000 | .000 |
| Impulsivity | Pearson Correlation | | | | | | | — | .500*** |
| | Sig. (2-tailed) | | | | | | | | .000 |
| C/U | Pearson Correlation | | | | | | | | — |
| | Sig. (2-tailed) | | | | | | | | |

Note. ^t = APSD subscale; ^y = mPPI-SV subscale.

* $p < .05$. ** $p < .01$. *** $p < .001$.

$p = .796$). Also included in the correlation matrix are the APSD subscales (e.g., narcissism, impulsivity, and callous/unemotional traits). The correlations between the APSD and the SRD and the three subscales are all significant ($p = .000$) as is a correlation ($r = -.175$, $p = .000$) between the mPPI-SV and the APSD Narcissism subscale. As expected, all of the APSD subscales are significantly correlated with each other. Interestingly, the correlation between the nine-item mPPI-SV and the callous/unemotional APSD subscale is nonsignificant ($r = .048$, $p = .199$), but the total mPPI-SV scale is significantly correlated with the callous/unemotional APSD subscale ($r = .414$, $p = .000$).

Discussion

The validity of measurement tools is critical to the study of crime and delinquency. It is crucial that researchers and practitioners have access to measures that accurately identify youth who are engaged in or are at risk for engaging in antisocial behavior, and who show low empathy and other affective deficits. Self-report scales have been developed to assess different dimensions of psychopathy in youth in ways that are conceptually similar to the Psychopathy Checklist, but that are more developmentally appropriate and less expensive to use (Munoz & Frick, 2007; Vaughn & Howard, 2005b).

This study examined the concurrent validity of the APSD in a juvenile offender sample by examining associations of the scale with two other self-report measures, the SRD and the mPPI-SV. Results indicated that SRD and APSD scores were significantly positively correlated, whereas the nine-item mPPI-SV and APSD scores were not significantly associated. There is a logical explanation, both clinically and theoretically, for the obtained results. The take-away message from this study does provide insight into

potential gaps in the most highly utilized self-report scale for assessing youth psychopathy – the APSD.

Numerous studies have shown that the APSD is useful in identifying severe and violent groups of juvenile offenders (Caputo, Frick, & Brodsky, 1999; Kruh, Frick, & Clements, 2005), predicting early onset of offending (Silverthorn, Frick, & Reynolds, 2001) and institutional antisocial behavior (e.g., aggression and administrative infractions), and forecasting poor treatment progress in adjudicated adolescents (Spain, Douglas, Poythress, & Epstein, 2004). While these features are part of the youth psychopathic montage, there are many additional features that should be assessed in order to truly identify someone as “psychopathic” such as low fear, callous unemotionality, and remorselessness. Similarly, the SRD captures antisocial acts and behaviors, thus there was a significant association between the APSD and SRD. However, the PPI is more of a pure personality measure, designed for use with noncriminal offenders and focuses on personality rather than behavioral attributes of psychopaths.

A closer examination of the PPI and its variants (e.g., mPPI-SV) shows that it provides an assessment of affective features that are not assessed in the SRD or APSD (Skeem, Polaschek, Patrick, & Lilienfeld, 2011) such as remorselessness, absence of guilt, and general callousness. It makes sense that the nine-item PPI affective item scale was not significantly associated with the APSD. Because the PPI was developed to index trait dispositions in personality-based conceptualizations of psychopathy in non-clinical samples (Lilienfeld & Andrews, 1996), it is organized in a way that highlights the affective personality traits that many youth with psychopathy display. The PPI includes eight unidimensional subscales that are not comprised of antisocial or criminal behavior

items such as those included in the SRD and APSD. The affective items used in this study were derived from factor 1 of the PPI, labeled Fearless Dominance/Callous-Unemotionality (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). This factor is made up of three subscales: social influence, fearlessness, and stress immunity and is associated with emotional stability and social efficacy- two aspects of psychopathy heavily based on Cleckley's original conceptualization. A case can be made that these measurement tools are grounded on different definitions of youth psychopathy; with each places a differing emphasis on certain core features (e.g., behavior, personality) of psychopathy.

For example, in their book, *Snakes in Suits: When Psychopaths Go to Work*, Babiak and Hare (2006) describe characteristics and similarities of psychopathy and leadership in the workplace. The authors identify manipulation, affective deficiencies, and narcissism as key characteristics of men and women with psychopathy in the workplace. Other researchers, such as sociologist Lee Robins (1966), place more emphasis on the antisocial and criminal behaviors that people with psychopathy are often involved in, while characterizing affective deficits as secondary traits associated with psychopathy.

The implications of this study lend support to the conclusions of a recently published article by Skeem, Polaschek, Patrick, and Lilienfeld (2011). In their groundbreaking monograph, Skeem and colleagues (2011) describe an integrative descriptive framework – the triarchic model. The triarchic model incorporates many different conceptualizations of psychopathy found in the literature. Skeem and colleagues divide the various definitions of psychopathy into three distinct, observable characteristics:

boldness (i.e., “fearless dominance”), meanness, and disinhibition. This model is useful when attempting to integrate the disparate historical conceptions, current operationalizations, and existing research programs focused on psychopathy.

Perhaps it is time for all researchers and clinicians to step back and re-assess the construct of psychopathy. As with most constructs, assessment of psychopathy should not be conducted with one tool and could benefit from the development of additional measures. Psychopathy is not a monolithic construct; thus, one score on one measurement tool should not compel a diagnosis, especially one with such potentially profound effects on the labeled individual. In short, this study shows that it may be beneficial to use both the PPI and the APSD to assess psychopathy in youth. To use the triarchic model that Skeem and colleagues (2011) have presented as a framework, perhaps an exhaustive measurement tool should be created; one that gauges the “constellation of multiple traits that may include, in varying degrees, the phenotypic domains of boldness, meanness, and disinhibition” (p. 96). In other words, it may help to reconceptualize psychopathy before we attempt to measure it. Perhaps youth with psychopathy differ from other youth in degree, rather than kind. It may be that Edens and colleagues (2006) are correct when they assess individuals not as psychopaths or not, but as relatively more or less psychopathic. If researchers take this view of psychopathy, then treatment programs can move away from the “one size fits all” model and begin to target specific, observable and potentially malleable features of seriously antisocial adolescents.

CHAPTER IV

JUVENILE PSYCHOPATHY: PREVALENCE, CORRELATES, AND RELATIONSHIP TO TRAUMATIC EXPERIENCES

Prologue

As discussed so far, many aspects of psychopathy are heavily debated and, in large part, remain unknown. Why individuals with psychopathy do what they do is among the many facets under scrutiny. Chapter 4 examines the role that trauma may play in the development of youth psychopathy. The nature of the construct and the characteristics of youth who are deemed psychopathic suggest that they will be involved in more “traumatic” events than nonpsychopathic youth. Given that one of the key characteristics of psychopathy is a callous/unemotional affect, “traumatic” events are not experienced the same way by youth with psychopathy as nonpsychopathic youth. Chapter 4 examines whether or not youth high in psychopathic traits have experienced more traumatic lifetime events than nonpsychopathic youth.

Background

“Psychopathy” is a term many people associate with cold-blooded murderers and rapists on the one hand and business executives who callously manipulate and maneuver their way up the corporate ladder on the other. While the media usually portray people with psychopathy in one extreme or the other, the “average” psychopath most likely lies somewhere in between. Despite decades of research devoted to understanding and treating people who possess psychopathic features, psychopathy itself remains an enigma. Currently, there are debates about the definition of psychopathy, its etiology, how best to

assess it, how to treat those who are diagnosed with it, and the implications a psychopathic label has for adults and youth.

However, researchers appear to agree on several key aspects of the psychopathy construct. Psychopathy is defined by a constellation of interpersonal, behavioral, and affective deficits that are often associated with socially deviant lifestyles (Hare, 2003) and each of these facets occurs in varying degrees and manifests in various ways (Skeem, Polaschek, Patrick, & Lilienfeld, 2011). Most researchers concur that 3% to 5% of adolescents become chronic, life-long criminal offenders and that a substantial fraction of these offenders (i.e., 20 to 60%) are juvenile psychopaths (Hare, 1996). As they age across the life course, psychopaths account for a majority of crime committed in the United States. At present, few interventions have targeted juvenile psychopaths and treatment findings to date are discouraging (e.g., O'Neill, Lidz, & Heilbrun, 2003). Thus, it is imperative that more be learned about the juvenile psychopath.

One area particularly in need of research concerns how trauma affects youth with psychopathy. Given their personality profiles and highly active risk-taking lifestyles, it is probable that youth with psychopathy experience a wide variety of traumatic events during their lifespan, yet little is known about the prevalence, nature, temporal ordering, and clinical significance of these experiences. Further, theorists have hypothesized that their callous and unemotional personality traits may serve to buffer psychopathic youth from the negative psychological consequences of traumatic events, paradoxically increasing the likelihood they fail to learn from adverse experiences and thereby to desist from criminal offending.

Background and significance

According to the DSM-IV, traumatic experiences are defined as “events or occurrences that involve actual or threatened death or serious injury, or that threaten one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about an unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate” (American Psychiatric Association, 2000, p. 463). Traumatic events may threaten or cause harm to a person’s emotional and physical well-being (Costello, Erkanli, Fairbank, & Angold, 2002; Singer, Anglin, Song, & Lunghofer, 1995). Traumatic reactions to such events can include depressive symptoms, anxiety, behavioral changes, nightmares, and psychosomatic aches and pains. These reactions, although distressing, are considered “normal.” The severity of symptoms depends, to some extent, on the person’s life experiences before the trauma, a person’s natural and acquired ability to cope with stress, the severity of the trauma, and the individual’s social support system. Medical professionals contend that non-psychopathic youth who experience such events react predictably in both physiological and psychological ways (Bailey & Garralda, 1990; Elsesser, Sartory, & Tackenberg, 2005).

Almost everyone has been or will be exposed to some kind of traumatic event in his or her lifetime (Elsesser et al., 2005). The older a person becomes, the more likely he or she is to have experienced a traumatic event. A telephone survey of a nationally representative sample of 2,000 youth aged 10 to 16 found that over 40% reported at least one traumatic experience (Boney-McCoy & Finkelhor, 1995). Other studies (e.g., Cuffe, Addy, Garrison, Waller, Jackson, McKeown, & Chilappagari, 1998; Giaconia, Reinherz, Silverman, Pakiz, Frost, & Cohen, 1995) obtained similar results, with females and

African Americans reporting greater exposure to traumatic events than males and Caucasians, respectively. Youths process and respond to traumatic events in widely varying ways, depending on internal and external supports unique to each person. Trauma may play important roles in both the etiology and maintenance of psychopathy in youth.

Trauma in the Etiology of Psychopathy

As touched on above, experiencing a traumatic event prenatally (e.g., anoxia, preeclampsia, and lead poisoning; drug or alcohol abuse by a pregnant mother), or in infancy and/or early childhood (e.g., physical or sexual abuse, harsh and inconsistent parenting practices, and severe neglect) can result in increased aggression and violence in the affected individual later in life. In their study, Krischer and Sevecke (2008) identified more extensive trauma histories in delinquent juveniles compared to non-delinquent adolescents. They found that for boys having experienced early physical and emotional trauma was correlated with psychopathy. In their review, Blair and colleagues (2005) contended that trauma may play a direct and indirect role in the development of psychopathy. Although it is accepted that traumatic events can lead to behavior problems in childhood and adolescence, the link has not been definitively made to psychopathy. More research regarding the temporal ordering of traumatic life events and psychopathic traits present in an individual is needed.

Trauma in the Maintenance of Psychopathy

A second potential role of trauma, involves its possible contribution to the maintenance of psychopathy in youth. Only a few researchers have explored this relationship (Chabrol, Saint-Martin, Sejourne, & Moyano, 2009; Cima, Smeets, & Jelicic, 2008; Furnham, Daoud, & Swami, 2009; Krischer, & Sevecke, 2008). Most of these researchers hypothesized that early childhood trauma would at least be a mediating risk

factor for childhood aggressive and violent behavior which are predictive factors for psychopathy in adulthood (Forth, Kosson, & Hare, 2003; Hare, 1991). Only one study produced results indicating that the psychopathic group had a significantly greater number of traumatic experiences than the control group (Moeller & Hell, 2003). Other studies (Vaughn, Howard, & DeLisi, 2008; Vaughn, Wallace, Davis, Fernandes, & Howard, 2008) have assessed traumatic experiences using the Massachusetts Youth Screening Instrument (MAYSI-2) Traumatic Experiences subscale. These studies found differences in prevalence of Caucasian and African American males' traumatic experiences with African Americans reporting greater numbers of traumatic experiences; however a correlation between the number of traumatic events experienced and psychopathy was not the focus of the study, thus a correlation was not reported (Vaughn, Howard, & DeLisi, 2008). The relationship between psychopathy and trauma has not been explored with the specific focus of the relationship that has enabled researchers to make substantially based conclusions. This paper is a step in that direction.

Traumatic events that might contribute to the maintenance of psychopathy include physical and/or sexual assault, being in a serious accident, witnessing a violent act, and being in combat (e.g., gang warfare). These events might occur in a reciprocal cycle because of the interpersonal manipulation and overall lack of affect found in youth with psychopathy. Antisocial acts committed by the youth with psychopathy are almost always driven by goal or reward attainment with little or no thought of punishment or consequences. The role of trauma in the maintenance of psychopathy is possibly twofold. The first is that psychopathic youth may experience more traumatic events than non-psychopathic youth. The traits and behaviors associated with psychopathy would appear

to make psychopathic youth more likely than nonpsychopathic youth to encounter high-risk situations and experience traumatic events, such as being physically attacked, being in a serious accident, sexual assault/abuse, verbal abuse, bullying, and violence in the home. Although this conjecture is speculative at this point, it seems reasonable to expect that youth who are prone to boredom, with low arousal levels, who are impulsive, and who have poor behavioral controls will tend to experience a greater number of traumatic events than youth without these characteristics.

The second way trauma may play out in the maintenance of psychopathy is that psychopathic youth may be buffered from the “normal” effects of trauma. The “buffer factor” from the effects of trauma is one that needs to be explored further. Blair and colleagues (2001) reported that traumatic experiences in this context are buffered due to the lower basal anxiety and stimulus response levels of psychopaths. They go on to allude that the effects of traumatic experiences are inversely related to the unique cluster of interpersonal/affective psychopathic characteristics while being positively associated with the impulsive/antisocial lifestyle characteristics. A study by Verona, Patrick and Joiner (2001) supports the notion that psychopathy may act as a protective factor against the psychological effects of trauma. While traumatic experiences are correlated with some of the behavioral aspects of psychopathy (e.g., violence and aggression), the effect of trauma on interpersonal and emotional functioning has yet to be determined.

Theory, such as, the Arousal-Seeking Behavior Theory, which posits that youth with psychopathy, through impulsivity, sensation seeking, and poor behavioral controls are more likely to experience traumatic events supports this notion. Gray’s theory applied to psychopathy (1987), derived from Lykken’s Low Fear Theory of Antisocial Behavior

(Lykken, 1957), which states that individuals with psychopathic traits have a tendency to overestimate the probability that positive consequences result from aggression, to underestimate the probability of negative consequences as a result of violence, and to thereby overvalue aggressive behavior. This theory supports the argument that psychopathic youth do not experience the mental, physical, and emotional consequences of trauma the way non-psychopathic youth experience them. The low anxiety and lack of emotional reactivity discussed above provide a logical correlation to the lack of stress and anxiety formation after a traumatic event has occurred. Without the experience of stress, fear, and anxiety to deter them from antisocial behavior, committing acts against other members of society for personal gain may become almost second nature for the psychopathic individual. This antisocial behavior coupled with a lack of emotionality leads psychopaths to focus on rewards and doing whatever it takes to achieve the reward without any personal or moral consequences felt by the perpetrator.

Youth with affective and interpersonal impairments will have a difficult time functioning within the normative behavioral boundaries of society. However, not all youths with affective and stress-related dysfunction are psychopathic. By definition, young psychopaths have low fear and anxiety and low arousal and high stimulus seeking traits. These characteristics place individuals on a trajectory to be involved in more events deemed “traumatic.” The lack of fear and low arousal provide a platform for the youth to explore deviant behaviors that give them experiences of pleasure or at least serves to not discourage the deviant behavior. When they finally attain a reward, however ill-gotten, their lack of remorse, guilt, and shame will help to instill this antisocial

behavior as an acceptable means to an end. The learned antisocial behavior is reinforced and the cycle continues until the youth is removed from society.

Applying this framework to psychopathic youth and how they experience trauma, as defined above, supports the need for more research in this area. As research has shown, psychopathic youth may process all events, including “traumatic” ones, differently than non-psychopathic youth. When the psychopathic youth is committing an antisocial act involving another person, he or she may not be experiencing the event as a non-psychopathic youth would. Equally, he or she may not experience the negative effects of trauma when he or she is the one being “traumatized.” That is to say, the event may not be as traumatic to him or her because the information being taken in is being processed dysfunctionally. The act is not “traumatic” in any sense of the word to the psychopathic youth. The act is only a means to an end, a goal or reward, and that is the only thing the psychopathic youth is focused on. The victim’s distress and emotional consequences of the act being committed may not come into play for the psychopathic individual. The affective response from the psychopathic youth is flat and he or she is unaffected by an emotional display from the victim. Thinking about psychopathy in this way could help intervention science generate programs that not only work on social skill building and information-processing with psychopathic youth, but also work toward increasing affective responses (e.g., guilt, remorse, empathy, and possibly fear) in order to decrease interpersonal manipulation and violence.

The current study

The present study assessed traumatic experiences in a sample of detained male and female juvenile offenders and explored the relationship between psychopathic

characteristics and history of traumatic experiences. All youth completed a 5-item *Traumatic Experiences* scale adapted from the Massachusetts Youth Screening Instrument – 2nd Version (MAYSI-2, Grisso and Barnum, 2000) and a 3-item Victimization Index, used to assess the frequency of personal experiences of criminal victimization in the year prior to incarceration. The Antisocial Process Screening Device (APSD, Frick & Hare, 2001) was used to assess psychopathic features in the study sample. Research supports the validity and reliability of the APSD (Poythress, Dembo, Wareham, & Greenbaum, 2006; Vaughn & DeLisi, 2008; Vaughn & Howard, 2008).

Research Hypotheses

We hypothesized that youth with greater levels of psychopathy would evidence significantly more numerous experiences of lifetime traumatic events and criminal victimization than youth with lower levels of psychopathy. We further expected that psychopathic youth would score higher on individual items within the trauma and victimization scales (e.g., have been badly hurt, been attacked, had a weapon used against them) that are most likely to result from those psychopathy characteristics that increase the likelihood of exposure to trauma and victimization (e.g., fearlessness).

Methods

Description of Dataset

There were 723 total cases and 1,185 variables included in the dataset. Data were collected in 2004 by Matthew Howard (PI) for a study of adolescent inhalant abuse. The sample consisted of youth committed to residential treatment for delinquent acts ranging from serious felonies to misdemeanors and status offenses. The Missouri Division of Youth Services (DYS) provides residential rehabilitation at 27 facilities statewide. With an average of 27 beds, facilities range in size from eight to 102 beds. DYS is the legal

guardian of residents aged 11-20 committed to its care by the Missouri juvenile court system. DYS was established to provide mandated state services including assessment, care, treatment and education to all youth committed to its care. This dataset provides a cross-sectional survey account of the sample.

Sample and Sampling

The DYS client population is representative of incarcerated youth nationally with regard to gender, age and number of youth incarcerated per 100,000 adolescents (Sickmund, 2004). All DYS residents (N = 740) were eligible to participate in the study. Due to attrition, 723 youth completed the interview representing 97.7% of DYS residents at the time interviewing was conducted, 99.3% of residents available for interviewing, and approximately 55.0% of youth committed to DYS guardianship in the prior year. This study is virtually a census of the population of DYS residents at the time the study commenced and a large, representative sample of DYS annual residents.

Data Collection

Youth signed informed assent forms and were given a \$10.00 stipend added to their facility monetary account for completion of the interview. The informed assent form and interview protocol provided detailed information about the study to each participant, as well as the name and contact telephone number for a non-study or university-affiliated advocate who they could contact for more information regarding the study. The youth were assured they were not required to participate, could cease participation at any point during the interview, and that their legal status would not be affected by their participation or nonparticipation in the study. As legal guardian of all youth, DYS provided formal consent for youth to participate in the study. Confidential one-on-one interviews were conducted in private areas within each facility by 15 graduate social

work students who had completed an intensive one-day training session. An interview editor was also present at each facility as youth were interviewed to minimize interviewer errors. Interviewing was completed over a 3-month period. All residents at each facility were recruited for participation at the time interviewing at that facility commenced. The protocol ensured that youths were interviewed only once. Youth completed the 30 to 90 minute interview session and were allowed breaks if they became fatigued, although they were constantly monitored by project staff consistent with DYS policy.

The study protocols and informed assent/consent were approved by the Missouri DYS IRB, the Washington University Human Studies Committee IRB (operating in strict accordance with the governing regulations for research on prisoners), the project was officially certified by the federal Office of Human Research Protection, and was granted a Certificate of Confidentiality by the National Institute on Drug Abuse. All youth received a document describing their privacy rights and a copy of the informed assent agreement.

Measures

Data were collected using a battery of measures. Several of the tools capture lifetime experiences of trauma, current and past psychiatric symptoms and disorders, criminal activity, antisocial personality traits, and lifetime number of psychoactive substances used. Measures to be used in the current study are discussed in more detail below.

Demographic Factors

Gender, age, ethnicity, grade (current or last completed), family receipt of public assistance, and geographical area of family residence (i.e., urban, suburban, small town, rural) were recorded for each youth.

Lifetime Trauma

All respondents completed a 5-item *Traumatic Experiences* scale adapted from the Massachusetts Youth Screening Instrument – 2nd Version (MAYSI-2, Grisso & Barnum, 2000). The MAYSI-2 has been used in numerous studies (Cauffman, Haapanen, Ingram, & Steiner, 2000; Grisso & Barnum, 2000; Grisso, Barnum, Fletcher, Cauffman, & Peuschold, 2001) and adequate reliability ($\alpha = .61-.86$) and concurrent validity has been shown for its subscales. Youth were asked to indicate whether or not (yes or no) they had ever seen someone severely injured or killed in person, had a lot of bad thoughts or dreams about a bad or scary event that happened to them, had ever been badly hurt or been in danger of getting badly hurt or killed, had ever in their whole lives had something very bad or terrifying happen to them, and whether or not they have attempted suicide ($\alpha = .69$ in the current study). Total scale scores were computed by summing scores on the trauma items. The items are listed in Appendix D.

A 3-item Victimization Index ($\alpha = .76$) was used to assess frequency of personal experiences of violent criminal victimization in the year prior to incarceration (e.g., “How many times in the past 12 months (prior to custody) have you a) been hit by someone trying to hurt you?; b) has someone used a weapon or force to get money or things from you?; c) been attacked by someone with a weapon or by someone trying to seriously hurt or kill you? Responses ranged from 0 (never) to 8 (2-3 times a day) for each item. Total scores ranged from 0-24 and were calculated by summing scores on the victimization variables. Scale items are included in Appendix E.

Psychopathic Traits

Youth completed the *Antisocial Process Screening Device* (APSD, Frick & Hare, 2001); a 20-item scale assessing features of juvenile psychopathy. A review of the

construct validity of the APSD (Poythress et al., 2006) revealed acceptable reliability (α 's = 0.85 to 0.93) and validity of the APSD. Respondents were read 20 statements and asked to indicate to what extent each statement describing characteristic attitudes or behaviors was true of them (0 = not at all true, 1 = sometimes true, 2 = definitely true).

Psychological Symptoms

Youth completed the Brief Symptom Inventory (BSI, Derogatis, 1975), a 53-item scale used to evaluate a broad range of psychological symptoms derived from the Symptom Checklist 90 – Revised (SCL-R-90, Derogatis, 1975, 1977). There are nine symptom dimensions assessed by the BSI: Somatization, Obsession-Compulsion, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism; and three global indices of distress: Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total. The global indices measure symptomatology, intensity of symptoms, and number of reported symptoms. The investigators report acceptable internal consistency reliability for all of the BSI subscales, ranging from .71 to .85. The BSI also showed acceptable test-retest reliability for the nine symptom dimensions ranging from .68 to .91, and for the three global indices ranging from .87 to .90 (Lilienfeld & Andrews, 1996).

Additional Measures

Two items used in the analysis were single items that were asked of youth in this study. The first question (“Has a doctor or psychiatrist ever diagnosed you with a mental illness?”) is one that 720 out of 723 youth in the study completed; 350 youth (48.6%) reported “no” and 370 youth (51.4%) reported “yes.” This item was included to assess lifetime history of diagnosis with mental illness. The second item was the total number of psychoactive substances a youth used in their lifetime. The composite score was derived

from the Drug Use section of the questionnaire. In this section, youth were asked about lifetime use of 20 different substances: heroin, other opiates (e.g., opium, methadone, Vicodin), Cocaine or Crack Cocaine, Barbiturates, Tranquilizers, Speed, Marijuana, Hallucinogens, Malt Liquor, Other Alcohol, Ecstasy, GHB/GBL, Ketamine, Cigarettes, Cigars, Oral Tobacco, Cough Syrup, Prescription Drugs (without a prescription), PCP, and Steroids. A total of 723 youth provided a composite drug use score.

Data Analysis

Three groups were established using APSD scores. Youth with scores on the APSD that were one SD above the mean were designated the “high” psychopathy group and youth who scored one SD below the mean were designated the “low” psychopathy group. All youth with APSD scores “in-between” the high and low groups were considered members of the medium group. This method for establishing groups was used because 1) cut points for the APSD have not been established in the literature, 2) scores on the APSD measure were normally distributed, and 3) this method allowed each subgroup to have an adequate sample size. An initial analysis of the APSD revealed adequate sample sizes for each group. Group details are presented in Table 4.1.

Table 4.1

Descriptive Statistics for the Antisocial Process Screening Device for Groups Scoring High, Medium, and Low on the Scale (N = 723)

| APSD group | N | M (SD) | Cumulative % |
|------------|-----|------------|--------------|
| High | 102 | 27.5 (2.4) | 14.1 |
| Medium | 477 | 18.1 (6.0) | 66.0 |
| Low | 144 | 9.6 (2.1) | 19.9 |
| Total | 723 | 18.1 (6.0) | 100.0 |

After establishing three groups based on APSD scores, group differences were examined using five dichotomized lifetime (i.e., MAYSI-2) and three past-year (i.e., Victimization Index) traumatic events using chi-square and ANOVA analyses. Results from the analyses illustrate whether or not groups of youth with high, medium and low APSD scores differ in the number and type of traumatic events experienced over their lifetime and over the 12 months prior to incarceration.

Regression analyses were used to demonstrate how psychopathy and other variables predict overall lifetime trauma and victimization scores using SPSS, version 19 (IBM SPSS, 2010). Gender and race were used as control variables in these analyses. Analyses were conducted so that the clustering of youth in facilities was accounted for. We used hierarchical clustering methods that do not require a priori knowledge of the number of groups to control for clustering. The independent variables are gender, age, ethnicity, mental illness, the APSD Score, number of psychoactive substances used, and the BSI score. The dependent variable is the index of trauma and victimization. Two general methods of hierarchical clustering methods are available: divisive and agglomerative (Hahmann, Volk, Rosenthal, Habich, & Lehner, 2009). In this study, the agglomerative techniques were used. The agglomerative techniques start with each object describing a subgroup, and then combine “like” subgroups into more inclusive subgroups until only one group remains. We used an expansion of pair-wise similarities, allowing control and adjustment of the aggregation process and its result. (Hahmann, et al., 2009).

Results

Differences in the prevalence of traumatic experiences by high, medium, and low APSD scores were compared using chi-square tests. Results are presented in Table 4.2.

Table 4.2

Differences in the Prevalence of Individual Lifetime Traumatic Experiences by High, Medium, and Low APSD Scores (Groups)

| Question | | APSD group | | | <i>p</i> value |
|--|---------------------|-----------------------|--------------------------|------------------------|----------------|
| | | Low <i>N</i> = 144 | Medium <i>N</i> = 477 | High <i>N</i> = 102 | |
| Have you ever seen someone severely injured or killed (in person- not in the movies or on TV)? | <i>N</i> % (Yes) | 84 58.3% | 308 64.6% | 75 73.5% | .048* |
| Have you ever had a lot of bad thoughts or bad dreams about a bad or scary event that happened to you? | <i>N</i> % (Yes) | 55 38.2% | 209 43.8% | 59 57.8% | .008** |
| Have you ever been badly hurt, or been in danger of getting badly hurt or killed? | <i>N</i> % (Yes) | 78 54.2% | 314 65.8% | 73 71.6% | .007** |
| Have you had something very bad or terrifying happen to you? | <i>N</i> % (Yes) | 81 56.3% | 311 65.2% | 77 75.5% | .005** |
| Have you ever tried to commit suicide? | <i>N</i> % (Yes) | 22 8.3% | 122 25.6% | 40 39.2% | .000*** |
| How many times in the last 12 months have you had someone use a weapon or force to get money or things from you? | <i>N</i> % (Yes) | 36 25.0% | 168 35.2% | 50 49.0% | .013* |
| How many times in the last 12 months have you been hit by someone trying to hurt you? | <i>N</i> % (Yes) | 96 66.7% | 373 78.2% | 85 83.3% | .040* |
| How many times in the last 12 months have you been attacked by someone with a weapon or by someone trying to seriously hurt or kill you? | <i>N</i> % (Yes) | 53 36.8% | 238 49.9% | 61 59.8% | .017* |

p* < .05. *p* < .010. ****p* < .001.

As illustrated in Table 4.2, results indicated that the prevalence of traumatic experiences, where the responses were dichotomized, differs significantly by high, medium, and low APSD groups. Not only is the prevalence of traumatic experiences significantly different between groups, there is a pattern within the responses where the percentage of those who answered “yes” increases from the low group to the medium group to the high group. The chi-square results suggest that the study hypothesis holds merit.

To take this a step further, we were able to run an ANOVA with the victimization scale because the responses were continuous. The ANOVA results confirmed the notion that individuals scoring higher on the APSD scored significantly higher than the low groups and in some cases, the medium groups. The results from the ANOVA can be found below.

- “Been hit by someone trying to hurt you” - $F(2, 720) = 6.417^{**}, p = .002$
 - Tukey post-hoc comparisons of 3 groups indicate the High group ($M = 2.78, 95\% \text{ CI } [2.37, 3.18]$) had significantly higher victimization scores than the Low group ($M = 1.83, 95\% \text{ CI } [1.50, 2.16]$), $p = .002$ and the Medium group ($M = 2.40, 95\% \text{ CI } [2.18, 2.61]$), $p = .021$

- “Had someone use a weapon or force to get money or things from you” - $F(2, 720) = 9.868^{***}, p = .000$
 - Tukey post-hoc comparisons of 3 groups indicate the High group ($M = 1.31, 95\% \text{ CI } [.96, 1.66]$) had significantly higher victimization scores than the Low group ($M = .47, 95\% \text{ CI } [.30, .64]$), $p = .000$ and the

Medium group ($M = .82$, 95% CI [.67, .97]), $p = .049$. The Medium group also had significantly higher scores than the low group ($p = .006$)

“Been attacked by someone with a weapon or by someone trying to seriously hurt or kill you” - $F(2, 720) = 6.417^{**}$, $p = .002$

- Tukey post-hoc comparisons of 3 groups indicate the High group ($M = 1.58$, 95% CI [1.23, 1.93]) had significantly higher victimization scores than the Low group ($M = .81$, 95% CI [.59, 1.02]), $p = .001$

Total Victimization Scale - $F(2, 720) = 10.84^{***}$, $p = .000$

- Tukey post-hoc comparisons of 3 groups indicate the High group ($M = 5.67$, 95% CI [4.73, 6.60]) had significantly higher victimization scores than the Low group ($M = 3.11$, 95% CI [2.51, 3.70]), $p = .000$ and the Medium group ($M = 4.40$, 95% CI [3.96, 4.85]), $p = .007$. The Medium group also had significantly higher scores than the low group ($p = .020$).

Results of the regression analyses are presented in Tables 4.3 and 4.4. Table 4.3 presents the five past traumatic experience items and Table 4.4 the three Victimization items.

Table 4.3

Multiple Linear Regression Analysis With MAYSI-2 Lifetime Traumatic Experiences Scale Score as Dependent Variable (N = 723)

| Variable | Parameter estimate | SE | t-test for Ho: Parameter = 0 | Prob > t |
|--|--------------------|------|---------------------------------|-----------|
| Intercept | -1.500 | .722 | -2.077 | .038* |
| Gender | .177 | .149 | 1.192 | .234 |
| Age | .175 | .043 | 4.113 | .000*** |
| Ethnicity | -.007 | .052 | -.129 | .897 |
| Mental illness diagnosis | .217 | .106 | 2.047 | .041* |
| APSD score | .003 | .009 | .274 | .784 |
| Number of psychoactive substances used in lifetime | .089 | .020 | 4.509 | .000*** |
| BSI total score | .017 | .002 | 10.637 | .000*** |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

The regression analysis presented an estimate for eight parameters: intercept, gender, age, ethnicity, lifetime history of mental illness diagnosis, APSD score, number of psychoactive substances used in lifetime, and BSI score. The general equation for the analysis was:

$$Y = a + b_1 * \text{gender} + b_2 * \text{age} + b_3 * \text{ethnicity} + b_4 * \text{mental illness} + b_5 * \text{APSD score} + b_6 * \text{number of lifetime psychoactive substances used} + b_7 * \text{BSI score}, (1)$$

where Y = lifetime traumatic experience, a = intercept, and gender, age, ethnicity, mental illness, APSD score, number of psychoactive substances used, and BSI score are dependent variables.

Table 4.4

Multiple Linear Regression Analysis With Victimization Operationalized by a Composite Score As Dependent Variable

| Variable | Parameter estimate | SE | t-test for Ho: Parameter = 0 | Prob > t |
|--|--------------------|-------|---------------------------------|-----------|
| Intercept | .496 | 2.397 | .207 | .836 |
| Gender | -1.341 | .497 | -2.696 | .007** |
| Age | .174 | .142 | 1.229 | .220 |
| Ethnicity | -.443 | .175 | -2.535 | .011* |
| Mental illness diagnosis | -.422 | .353 | -1.195 | .233 |
| APSD total score | .078 | .031 | 2.524 | .012* |
| Number of psychoactive substances used in lifetime | .231 | .066 | 3.520 | .000*** |
| BSI score | .031 | .005 | 5.883 | .000*** |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

As Table 4.3 indicates, youth scores on the BSI, number of psychoactive substances used, age, and mental illness significantly predicted the lifetime traumatic events dependent measure. Conversely, APSD scores were nonsignificant predictors of the traumatic events.

There is an estimate for eight parameters, intercept, gender, age, ethnicity, mental illness, APSD score, number of psychoactive substances used, and BSI score. The general equation for the analysis was:

$$Y = a + b_1 * \text{gender} + b_2 * \text{age} + b_3 * \text{ethnicity} + b_4 * \text{mental illness} + b_5 * \text{APSD score} + b_6 * \text{number of lifetime psychoactive substances used} + b_7 * \text{BSI score}, (2)$$

where Y = victimization, a = intercept, and gender, age, ethnicity, mental illness, APSD score, number of psychoactive substances used, and BSI score are dependent variables.

As Table 4.3 indicates, youth scores on the BSI, number of psychoactive substances used, age, and mental illness significantly predicted the lifetime traumatic events dependent measure. Conversely, APSD scores were nonsignificant predictors of the traumatic events. The nonsignificant results of this test will be discussed below.

The results of the victimization regression displayed in Table 4.4 indicate that the BSI score, number of psychoactive substances used, scores on the APSD, gender, and ethnicity significantly predicted victimization of youth in this study. These results will be discussed in more detail below.

Discussion

Results of this study do support the notion that psychopathic features in youth, as measured by the APSD, are correlated with traumatic events and experiences. The chi-square tests, the ANOVA, and the regression of the victimization scale on predictors all revealed significant associations between the two constructs. Results indicate that traumatic events and victimization do indeed play a role in youth psychopathy and should be carefully assessed and considered when working with youth with psychopathy.

In the first regression analysis, where the trauma index was used as the dependent variable, the ASPD was not a significant predictor. However, before dismissing the notion that youth with psychopathy experience a wide variety of traumatic events during their lifespan, we need to ensure that youth are accurately assessed for “psychopathic” traits and not just antisocial behavior. Youth with psychopathy have, by definition, low fear, low anxiety, low arousal and high stimulus-seeking traits. A closer look at the APSD reveals that many of these traits may not be adequately assessed. Other key psychopathic characteristics that should be assessed are the inaccurate cognitive and

emotional processing that go along with the attainment of rewards and the acceptance of punishment, as well as the overall lack of remorse, guilt, and shame.

Also, the traumatic experiences scale should be geared more toward this subgroup of adolescent offenders. Youth with psychopathy could potentially misread or misconstrue the questions. For example, a youth who was notably unemotional may not believe he has been in danger of being hurt or killed and he may not have bad thoughts and/or dreams about his past actions because he is buffered from the adverse effects of such acts. Questions may need to be more direct and detailed about events that occurred before, during and after potentially traumatic experiences. Questions about affect and feelings should be added to the behavioral measures so that a group of highly antisocial youth who are aggressive and violent can be distinguished from the group of youth who might show aggression and violence, but also have the aforementioned psychopathic characteristics. Once psychopathic characteristics are accurately assessed, one might then be able to properly test whether or not there are differences between groups with respect to trauma and victimization experiences.

The second regression revealed that ASPD scores were predictive of victimization. This finding is extremely important. The notion that higher psychopathy scores predict higher levels of victimization does actually support the hypothesis that youth with psychopathy are more likely to put themselves in a greater number of “traumatic” experiences. One issue that needs to be explored further is the perceived definitions of “traumatic experiences” and “victimization” need to be defined in a detailed manner so that the youth in question understand the meaning of each term and comprehend the difference between the two. These results lead to further hypotheses as

well. Perhaps describing events as “traumatic” is inaccurate due to the notion that youth with psychopathy are not emotionally traumatized by certain events. One way to answer these questions would be to create a new survey to elicit more detailed information about past events. This topic could also benefit from more qualitative work where detailed information can be obtained through interviews and case studies.

As the results suggest, the relationship between certain types of traumatic experiences and psychopathy are significant and with more studies focusing on exactly what kind of trauma was experienced, what role the youth in question (study participant) played in the traumatic event, and the circumstances in which the event took place are factors that could help to shed light on psychopathy in youth and adults.

The two roles that traumatic experiences might play in the maintenance of psychopathy deserve further research. Callous and unemotional personality traits may buffer psychopathic youth from negative psychological consequences of traumatic events, while paradoxically increasing the likelihood they fail to learn from adverse experiences and thereby to desist from criminal offending. The traits and behaviors associated with psychopathy predispose youth to enter high-risk situations and experience traumatic events, such as being physically attacked, being in a serious accident, sexual assault/abuse, verbal abuse, bullying, and violence in the home. Youth who are prone to boredom, who have low arousal levels, who are impulsive, and who have poor behavioral controls experience a greater number of “victimization” events than youth without these characteristics.

Even with decades of research on this construct, questions remain regarding just about every aspect of this subgroup of offenders. Accurate assessment of youth and

adults is needed before we can begin to explore possible correlates (e.g., traumatic experiences) and their role in the etiology and maintenance of psychopathy. If we know that a small group of offenders commits almost half of the serious crime in our society, and that many of these criminal offenders have psychopathic traits, then is it not worth spending resources to properly assess youth with psychopathic traits in an attempt to prevent and intervene appropriately? The alternative is a lifetime of committing crimes and being shuffled in and out of our current justice system that has proven to be largely ineffective with this group of lifelong persistent offenders.

Limitations of this study should be considered. First, this sample of youthful offenders was comprised largely of Caucasians and African Americans, which limits the generalizability of the findings to these groups. Second, the cross-sectional data used in this study do not allow for determination of causal relationships. Longitudinal data could have enabled the temporal ordering of psychopathic traits and traumatic experiences through childhood and into adolescence. And lastly, a community sample or control group of non-incarcerated youth would have been useful in determining differences in traumatic experiences. Despite these limitations, the current study is an attempt to address a reasonably sound notion regarding psychopathic youth and traumatic experiences given a high response rate in a large study population and a wide array of covariates used in an appropriate analysis.

CHAPTER V

CONCLUSION

Juvenile psychopathy refers to a disorder of youth characterized by callous/unemotional traits, narcissism, impulsivity, and antisocial behavior. Despite what we have learned via scientific research and clinical experience, this subgroup remains understudied and poorly understood. Research focused on juvenile psychopathy is crucial in order to better understand youth who fit this description.

The chapters within this document address several topics of debate within the field of juvenile psychopathy. Chapter 2 provides practitioners with a better understanding of psychopathic youth. Practitioners are often the first group of professionals who can identify children and adolescents who are psychopathic. It is the responsibility of practitioners to ensure that all people who receive care are given respect and the best care possible. Accurate identification and assessment is a crucial part of the treatment process.

Chapter 3 addresses the issue of identification and assessment. The APSD, one of the most common tools used to assess youth with psychopathy, was examined for concurrent validity. Given that psychopathy is a disorder that is operationalized and conceptualized in many different ways, it is safe to say that it should not be measured with only one assessment instrument. It is imperative that appropriate assessment tools are used when screening youth for psychopathy given the potentially harmful effects of a psychopathic label.

Finally, Chapter 4 examined psychopathy and correlates of the disorder. Again, the operationalization and conceptualization of the researcher's own ideas about psychopathy lead to the examination of certain correlates. In this case, the lack of fear and the arousal-seeking behavior undergird the notion that youth with psychopathy will encounter more life events that could be deemed traumatic. While the results for this hypothesis were nonsignificant, the finding that psychopathy was associated with victimization is important thus the idea still has merit. The more we know about the life-course of youth with psychopathy, the more accurate our prognoses will be of the youths' trajectories and subsequent outcomes. The fact that this research did not supply a satisfying answer and may have even left more questions is not a cause for concern. This research supports the notion that psychopathy is not a monolithic construct and that we need continued interdisciplinary and translational research on juvenile psychopathy.

Appendix A

Self-Report of Delinquency (SRD): Scale Items, Item Response Options, Range of Possible Scores, and Alpha Reliability

Scale Items:

In the year prior to custody, how many times have you:

- 1. Stolen a motor vehicle
- 2. Stolen things worth more than 50 dollars
- 3. Bought or sold stolen goods
- 4. Stolen things worth less than 5 dollars
- 5. Stolen marijuana or other drugs
- 6. Avoided paying for things
- 7. Stolen things worth between 5 and 50 dollars
- 8. Carried a hidden weapon
- 9. Been in a gang fight
- 10. Hit a teacher
- 11. Hit a parent
- 12. Hit other students
- 13. “Strong-armed” students (e.g. bullied, threaten with force)
- 14. “Strong-armed” parents (e.g. bullied, threaten with force)
- 15. “Strong-armed” teachers (e.g. bullied, threaten with force)
- 16. Forced someone to have sex
- 17. Attacked someone

*Response options for each item

| | | | | | | | | |
|-------|----------------------------|-------------------------|----------------|------------------------|---------------|--------------------|--------------|-----------------|
| Never | 1-2 times in the last year | 1 time every 2-3 months | 1 time a month | 1 time every 2-3 weeks | 1 time a week | 2-3 times per week | 1 time a day | 2-3 times a day |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Range of possible scores: 0 to 136

Alpha reliability: 0.84

Higher scores reflect more frequent/diverse antisocial behavior in the year prior to entering residential care.

Appendix B

Modified Nine-item Psychopathic Personality Inventory-Short Version (mPPI-SV): Scale Items, Item Response Options, Range of Possible Scores, and Alpha Reliability

Scale Items:

- Affective items from the mPPI-SV included in analysis were:
 - 7. I'm the kind of person who gets "stressed out" pretty easily. (reverse coded)
 - 13. Ending a friendship is (or would be) very painful for me. (reverse coded)
 - 21. It bothers me greatly when I see someone crying. (reverse coded)
 - 29. I often hold on to old objects or letters just for their sentimental (i.e., emotional) value. (reverse coded)
 - 37. I often feel very nostalgic (sentimental) when I think back to peaceful moments in my childhood. (reverse coded)
 - 39. I can remain calm in situations that would make other people panic.
 - 45. I sometimes worry about whether I might have accidentally hurt someone's feelings. (reverse coded)
 - 47. When I want to, I can usually put fears and worries out of my mind.
 - 50. I become embarrassed more easily than most people. (reverse coded)

*Response options for each item

| False | Mostly False | Mostly True | True |
|-------|--------------|-------------|------|
| 1 | 2 | 3 | 4 |

Range of possible scores: 0 to 36

Alpha reliability: .76

Higher scores indicate greater affective deficits.

Appendix C

Antisocial Process Screening Device (APSD): Scale Items, Item Responses Options, Range of Possible Scores, and Alpha Reliability

Scale Items:

- As each statement is read, decide how well it describes you.
 - 1. You blame others for your mistakes.
 - 2. You engage in illegal activities.
 - 3. You care about how well you do at school/work. (reverse coded)
 - 4. You act without thinking of the consequences.
 - 5. Your emotions are shallow and fake.
 - 6. You lie easily and skillfully.
 - 8. You are good at keeping promises. (reverse coded)
 - 9. You brag a lot about your abilities, accomplishments, or possessions.
 - 10. You get bored easily.
 - 11. You use or “con” other people to get what you want.
 - 12. You tease or make fun of other people.
 - 13. You feel bad or guilty when you do something wrong. (reverse coded)
 - 14. You do risky or dangerous things.
 - 16. You act charming and nice to get things you want.
 - 17. You get angry when corrected or punished.
 - 18. You think you are better or more important than other people.
 - 19. You do not plan ahead or you leave things until the “last minute.”
 - 20. You are concerned about the feelings of others. (reverse coded)
 - 21. You hide your feelings or emotions from others.
 - 22. You keep the same friends. (reverse coded)

*Response options for each item

| Not At All True | Sometimes True | Definitely True |
|-----------------|----------------|-----------------|
| 0 | 1 | 2 |

Range of scores possible: 0 to 40

Alpha reliability: .71 Higher scores indicate higher antisocial and criminal behaviors.

Appendix D

MAYSI-2 Traumatic Experiences Scale

1. Have you ever seen someone severely injured or killed (in-person, not in the movies or on TV)?
2. Have you ever had a lot of bad thoughts or bad dreams about a bad or scary event that happened to you?
3. Have you ever been badly hurt, or been in danger of getting badly hurt or killed?
4. Have you ever, in your entire life had something very bad or terrifying happen to you?
5. Have you ever tried to commit suicide?

*Yes/No Response Format

Alpha reliability: .69

Scores could range from 0 – 5 with higher scores reflecting more lifetime traumatic experiences.

Appendix E

Past Year Victimization Scale

1. How many times in the last 12 months (prior to incarceration) have you had someone use a weapon or force to get money or things from you?
2. How many times in the last 12 months (prior to incarceration) have you been hit by someone trying to hurt you?
3. How many times in the last 12 months (prior to incarceration) have you been attacked by someone with a weapon or by someone trying to seriously hurt or kill you?

*Response options

| | | | | | | | | |
|-------|----------------------------|-------------------------|----------------|------------------------|---------------|--------------------|--------------|-----------------|
| Never | 1-2 times in the last year | 1 time every 2-3 months | 1 time a month | 1 time every 2-3 weeks | 1 time a week | 2-3 times per week | 1 time a day | 2-3 times a day |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Range of scores possible: 0 to 24

Alpha reliability: .76

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