AFRICAN AMERICAN STATUS OFFENDERS:
THE IMPACT OF TRAUMA AND FAMILY FACTORS ON MENTAL HEALTH OUTCOMES

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
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ABSTRACT

This study examined the impact of exposure to trauma and family/parenting risk factors on mental health outcomes among African American status offenders. A cross-sectional research design was utilized. Gender differences were also evaluated. The sample was comprised of 46 females and 24 males who were referred to a diversion program. Court personnel administered the Global Risk Assessment Device (GRAD) via a structured interview with the youth as part of the intake process for the diversion program. In addition to the main items of the GRAD, the youth completed 40 demographic questions, including household composition and family income. It was hypothesized that female participants would report higher levels of risk on the exposure to trauma, family/parenting, and mental health subscales of the GRAD. Additionally, it was hypothesized that mental health outcomes would be predicted by knowledge of risks on exposure to trauma and family/parenting issues. Finally, the researcher posited that the trauma domain could be evaluated for two underlying factors: trauma witnesses and trauma victims. A multivariate analysis of variance (MANOVA) examined the gender differences on the three GRAD domains (exposure to trauma, family/parenting, and mental health). A set of univariate regression analyses was conducted to test the
hypotheses related to predicting mental health outcomes. Finally, an exploratory factor analysis was conducted to examine the exposure to trauma domain more closely.

Results indicated that African American male and female status offenders did not report statistically different risk factors on exposure to trauma, family/parenting, and mental health, as measured by the GRAD. Knowledge of trauma exposure and family/parenting risk factors helped predict mental health outcomes for male and females. Finally, the exploratory factor analyses produced a chi-square goodness of fit that did not support existence of two factors on the trauma domain. The implications of these results are discussed.
Dedicated to the Memory of Renee Rhodes
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CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

Each year, two million youth are arrested in the United States (Snyder & Sickmund, 2000), and a growing number of these cases are for status offenses or behavior that is outlawed due to the individual’s age. Examples of status offenses include, but are not limited to, running away from home, truancy, underage drinking, and being considered ungovernable or unruly. A recent report by Sickmund (2000) provided an overview of the types of crimes comprising the juvenile justice caseload. This report estimated that status offenses accounted for 14% of arrests, compared to other types of charges including person offenses (22%), property offenses (48%), drug law violations (10%) and violent crimes (6%). Though status offenses are not the most prevalent offense, justice officials note that such offenses are more common than violent crimes. For instance, a report by the U.S. Department of Justice indicated that crimes such as running away occurred at a much higher rate (123,600 arrests) than violent crimes (92,300 arrests) in 2003 (Snyder & Sickmund, 2006). Sickmund (2000) also reported that the number of status offenses formally processed by the juvenile court system increased 101% from 1988 to 1997, indicating a need to focus on this population. Similarly,
Belknap, Holsinger, and Dunn (1997) reported that the top ten offenses committed by all youth in 1995 were minor offenses. Together, this information implies a need to further examine status offenders because of the prevalence and continual rise in such behaviors.

Researchers have sought to understand characteristics that are associated with youthful offenders. In a recent study, Gavazzi, Yarcheck, and Lim (2005) found that status offenders reported higher levels of risk on family/parenting concerns in an at-large court sample and found higher risk among the status offenders. This is important because this group is often considered less serious than other types of offenders; yet, youth charged with status offenses often report a myriad of risk factors, including exposure to trauma and familial factors. Some have suggested that status offenders in particular are more likely than other offenders to experience maltreatment (Famularo, Kinscherff, Fenton, & Bolduc, 1990). Specifically, recent efforts suggested that many justice-involved youth report prior history of trauma exposure (Dodge, Bates, & Petit, 1990), including physical and sexual abuse. In fact, it is estimated that trauma occurs between 54% (Chesney-Lind, 2001) and 92% (Acoca, 1998) of youthful offenders.

Exposure to trauma among youthful offenders is high, and the research literature suggests that the majority of female offenders have histories of sexual and physical abuse (Acoca & Dedel, 1998; Breslau, Davis, Andreski, & Peterson, 1991; McCabe, Lansing, Garland, & Hough, 2002). For example, Acoca (1998) found that 92% of a large sample of justice-involved youth reported one or more types of abuse. Widom (2000) reported that female youth with a history of trauma are twice as likely as females without trauma history to be arrested. Furthermore, a study using in-depth interviews with female offenders reported that many of the participants cited being victimized as the “equivalent
of first steps leading to offending as juveniles” (Acoca, 1998, p. 565). Chesney-Lind (1997) posits that a history of abuse is one of the most common traits of females who are involved in the justice system. Despite potential differences in exposure, additional research suggests that male and female juveniles with exposure to trauma may react to such incidents differently. For instance, Cauffman, Feldman, Waterman, and Steiner (1998), found that despite similar exposure to trauma rates, incarcerated females had higher rates of post traumatic stress disorder than both the general population and incarcerated males. The high prevalence rates of trauma among justice-involved youth, and the potential gender differences, in exposure and reaction to trauma, warrant closer study of trauma and related risk factors among status offenders.

To date, there is limited research on differences that may exist with regard to types of trauma. Most studies utilize broadly defined concepts of trauma, and do not differentiate between experiencing trauma as a victim and witnessing something traumatic (e.g., someone being shot, abused, etc.). Due to the reliance on a trauma construct that is broadly defined, there is a limited understanding about how exposure to trauma and victimization of trauma may impact youth differently. It should be noted that the trauma subscale in the current study is a subscale of the Global Risk Assessment Device (GRAD; Gavazzi, Slade, Beuttner, Partridge, Yarchock & Andrews, 2003). Although other subscales (e.g., family/parenting and mental health domains) of the GRAD have been examined with regard to concurrent validity (Gavazzi & Lim, 2003; Gavazzi et al., 2003), the trauma domain has not been tested rigorously.

Exposure to traumatic events has been identified in connection with other risk factors, such as family problems including family history of mental illness (McCabe, et
al., 2002), parental abuse (Hoyt & Scherer, 1998), parental conflict (Loeber & Stouthamer-Loeber, 1998; Prochnow & DeFronzo, 1997), parental substance abuse (Dembo, Pachecho, Schmeidler, Ramirez-Garmica, Guida, & Rahman, 1998; Rhodes & Fischer, 1993), parental criminality (Dembo et al., 1998; Dixon, Howie, & Starling, 2004), and parental monitoring (Patterson, Reid, & Dishion, 1992). As in exposure to trauma, some scholars posit that gender differences emerge with regard to family risk factors as well (Gavazzi, 2006; Rhodes & Fischer, 1993). Specifically, Finkelhor and Baron (1986) reported that many female victims of sexual abuse were abused by a family member. The authors also suggested that familial sexual abuse against females often begins at a young age and continues for a long time. In a recent study by Simkins and Katz (2002), the authors conducted a snapshot view of female offenders and identified the following as typical characteristics of a young female offender: multiple foster care placements, parental drug use, and a history of trauma. It is possible that offenders with multiple risk factors may also have mental health concerns.

Exposure to traumatic events and growing up in problematic family environments may impact the mental health of children and adolescents. Though causality can not be claimed because of the nature of research on risk factors, there is evidence of associations between mental health issues and delinquent behavior (Acoca, 1998; Veysey, 2003). Lexcen and Redding (2000) suggested that court-involved youth have mental health disorders at two to three times greater than the general population. Others have reported that many court-involved youth likely meet diagnostic criteria for more than one mental health disorder (Ulzen & Hamilton, 1998). Empirical studies (Berton & Stabb, 1996; Dixon, Howie, & Starling, 2004; McCabe et al., 2002; Otto, Greenstein, Johnson, &
Friedman, 1992) have indicated that youth who encounter the justice system often meet criteria for specific disorders, including mood disorders (i.e., depression and bipolar disorder), disruptive disorders (i.e., conduct disorder and oppositional defiant disorder), and anxiety disorders (i.e., generalized anxiety disorder and post-traumatic stress disorder). As stated above, young offenders, such as status offenders, often present to the justice system a multitude of risk factors, including exposure to trauma, family conflict, and mental health concerns that can add to the difficulties of working with offenders. Examining whether or not these types of risk factors are present among status offenders can contribute to a clearer understanding of offending, and can inform prevention and intervention practices aimed to provide support to the youth.

1.2 Background and Significance

An examination of the literature on status offenders revealed that many youth who encounter the justice system often report problematic behavior and interpersonal difficulties that are referred to as extra-legal factors (Gavazzi, Yarcheck, & Lim, 2005). The presence of such factors complicates treatment of status offenders, because additional special programming is often required that addresses behavioral, mental health, and interpersonal difficulties. As the juvenile justice system strives to offer a rehabilitative framework in the treatment of youthful offenders, many states have adopted alternative programming designed to address these issues. Better knowledge of risk factors can lead professionals (i.e., parole officers, court personnel, etc.) to make more appropriate referrals to programs that can provide appropriate mental health services to treat the underlying issues that contribute to offending.
Specific risk factors relevant to status offenders include family problems, academic struggles, poverty, offense history, health problems, mental health difficulties, and exposure to traumatic events (Chesney-Lind, 2001; Funk, 1999; Gavazzi, 2006). This list is not intended to be exhaustive but rather to provide a broad overview of some common risk factors present in status offenders. The following section highlights three specific risk factors: (a) exposure to trauma (b) mental health issues, and (c) family and parenting as well as important demographic factors.

1.2.1 Exposure to Traumatic Events

Traumatic events, such as witnessing violence and experiencing abuse are common occurrences in the United States (Kilpatrick, Saunders, & Smith, 2003), and this is especially true for adolescents and residents of urban neighborhoods (U.S. Department of Justice, 2004). In a study of middle school students, Campbell and Schwarz (1996) found that two-thirds of urban youth and 40% of suburban youth reported being victims of violence (i.e., being beaten up, robbed, stabbed, or shot) and even greater numbers of youth reported witnessing others being injured. Kilpatrick et al. also reported that 8.8 million youths indicated they have seen someone else seriously injured by violence, sexually assaulted, or threatened with a weapon. The authors further posited that the emotional consequences of such trauma can take many forms, including psychological disorders, substance use/abuse, and delinquency.

Empirical work has demonstrated that the experience of trauma, during youth, can have profound and negative outcomes, during adolescence and adulthood. For example, a longitudinal study of urban middle school students, by Ozer (2005), found that those
youth who experienced trauma (i.e., exposure to violence) reported high levels of anxiety symptoms. Additional research on exposure to trauma has focused exclusively on the occurrence of sexual abuse. Kendler, Bulik, Silberg, Hettema, Myers, & Prescott (2000) studied over 1,400 female adult twins and found a positive association between childhood sexual abuse and several mental health disorders, including bulimia and alcohol and drug dependence. These results remained, after the authors controlled for familial factors, such as parental psychopathology. Further, the authors concluded that young females who were forced to have sex were three times more likely to develop psychiatric disorders than those who were not sexually abused.

Though precise numbers are not available, burgeoning literature suggests that rates of traumatic experiences are even more prevalent among juvenile youth than those in the general population. For instance, rates of trauma are estimated to occur in 54% (Chesney-Lind, 2001) to 92% (Acoca, 1998) of youthful offenders compared to rates of 8% to 30% of youth in a national survey (National Child Traumatic Stress Network, 2005). Many victims of trauma or abuse may flee their homes and encounter situations (e.g., gang involvement, prostitution, etc.) on the streets that lead them to the justice system (Veysey, 2003). In a relevant longitudinal study, Widom and Maxfield (2001) examined the link between abuse and criminality, by comparing arrest records for youth with and without a history of abuse and/or neglect. Their results indicated that, “childhood abuse and neglect increased the odds of future delinquency and adult criminality by 29%” (p. 3.). Additional evidence is apparent in Kirkpatrick et al.’s (2003) national survey of adolescents, which indicated that 47.2% of male victims of sexual assault reported engaging in delinquent acts compared to 16.6% of those without a
history. Rates, among females who committed delinquent acts, also reflected an association with a history of sexual assault, indicating the link between exposure to trauma and subsequent contact with the justice system. For example, Arnold, Kirk, Roberts, Griffith, Meadows, and Julian (2003) examined 100 incarcerated adolescent females and found that adolescents who reported sexual abuse had higher rates of felony offenses than incarcerated females without such a history. Similarly, Dembo et al. (1998) examined youth in a Florida assessment center and found that among female adolescents, 47% reported a history of sexual victimization compared to 22% of males. Having a history of trauma, particularly abuse, is quite common among young offenders.

The experience of trauma is likely to impact youth in several ways and can contribute to the reasons they encounter the legal system in the first place. Young offenders with a history of trauma are often at risk for recidivism, additional crimes (Widom & Maxfield, 2001) or possibly limited success in alternative programming (Gavazzi et al., 2005). For example, Veysey (2003) suggests that trauma represents a link to unlawful behavior, because youth who are traumatized often have a limited scope or maladaptive coping strategies, including methods that lead them to encounter the legal system. She further posited that some youth who are arrested for status offenses may have been attempting to protect themselves with physical strategies (e.g., running away, physically defending themselves, etc.), psychological strategies (e.g., internalizing behaviors, risk taking, forming maladaptive schemas and misinterpreting cues from others, etc.), and by modeling maladaptive strategies (e.g., repeating violent behavior, coping with conflict via violence, showing lack of respect for others, etc.). All of these strategies may represent the impact of being exposed to trauma.
1.2.2 Mental health

Over the years, research has indicated associations between a history of trauma and the presence of mental health difficulties, particularly among youthful offenders. The number of youth in the juvenile justice system with psychiatric disorders is “a major public health problem” (Abram, Teplin, Charles, Longworth, McClelland, & Dulcan, 2004, p. 403). Rates of mental health disorders, among court involved youth, occur two to three times more often than youth of the general population (Lexcen & Redding, 2000). Others have reported that over 50% of youth involved with the justice system have more than one diagnosable mental health disorder (McCabe et al., 2002; Ulzen & Hamilton, 1998). Research has also indicated that some disorders, such as substance abuse, mood disorders (i.e., depression and bipolar disorder), disruptive disorders (i.e., conduct disorder and oppositional defiant disorder), and post traumatic stress disorder occur frequently among youth involved with the justice system (Berton & Stabb, 1996). It is critical to identify youth with such histories to gain a better understanding of their behaviors and to provide relevant treatment and/or specific trauma-focused programming that can help address such underlying issues. Treatment of mental health issues in youth is often complicated by other risk factors, including familial problems, which can also impact youth’s behavior.
1.2.3 Family and Parenting

Children and adolescents who commit status offenses are minors and likely reside with parents, guardians, or other family members. There is growing support in the literature that evidences the relationship between the role of family process factors and delinquent behavior (Gavazzi, 2006). Many youth who present to the juvenile justice system have familial problems including caregivers with poor parenting skills (Patterson & Dishion, 1985), family history of substance abuse (Grant, 2000; MacNeil, Stewart, & Kaufman, 2005), attachment issues (Sampson & Laub, 1994), parental mental health problems (VanDeMark, Russell, O’Keefe, Noether, & Gampel, 2005), and poor family functioning (Cashwell & Vacc, 1996). Children with exposure to such stressors are at risk for emotional and behavioral problems. For example, VanDeMark et al. (2005) studied a sample of children whose mothers were seeking treatment and found that 67.5% of youth displayed emotional and behavioral problems. The authors also suggested that the children in this study were at risk for such problems because they were experiencing frequent exposure to domestic violence, parental incarceration, and having a parent institutionalized for mental health problems. This research highlights the role that family factors can have on youth with regard to their emotional health and their behavior.

Additional research has examined family process factors (e.g., parental monitoring and supervision) and found that specific factors are associated with youth delinquency. For example, Patterson and Dishion (1985) conducted a study with 136 adolescent males and found that parental monitoring, or the level of supervision of youth by parents/guardians, exerted direct and indirect influence on youths’ delinquent behavior. Specifically, they found that failure to track the child’s whereabouts and
behaviors provided opportunities for the youth to commit delinquent acts and to seek out deviant peers. In a more recent study, Gavazzi (2006) examined risk factors among over 1,600 youth who were involved with the juvenile justice system and identified some important differences among the sample. This study utilized an instrument that is scaled on a 3-point Likert scale, with higher scores indicating higher levels of risk on 11 domains. On the parenting/family domain of the Global Risk Assessment Device (GRAD), Gavazzi found that African American females displayed the highest risk scores, followed by Caucasian females. These findings suggest that African American females experience more frequent familial issues, such as family conflict. These findings also suggest that understanding the role of parents and families is valuable information to have when working with youth who are at-risk or already involved with the justice system. Because many youth live with parents or other caregivers, studying the role of parenting and family can augment other information regarding risk factors of the youth and can inform intervention and treatment programming. Additionally, many youth continue to reside with families in the same environment that existed prior to their encounter with the law; thus, identification of specific family/parenting risk factors has implications for program development and relevant interventions.

1.3 Demographic Factors

1.3.1 Gender

When examining status offenders, the role of gender emerged as an important factor to consider. First, female youth represent the fastest growing segment of the juvenile justice system (American Bar Association, 2001). More specifically, the FBI
(2002) reported that status offenses accounted for 26% of arrests among female youth compared to only 15% of male arrests. Second, there is a dearth of knowledge about female offenders because traditional theories of juvenile offending are based on work with males only. Third, there is evidence that male and female status offenders present different risk factors (Funk, 1999), and separate evaluation of such factors is important. Fourth, it is clear that exposure to trauma is a relevant factor to study among offenders, and some research even suggests that females are more vulnerable to exposure to trauma (and actually experience trauma at a higher rates) than males (Rhodes & Fischer, 1993). Fifth, males and females may react to stressors in unique ways that impact the pathway which leads them to encounter the justice system (Chesney-Lind, 2001).

1.3.2 Ethnicity

There is also a need to examine the role of ethnicity among status offenders. First, evidence suggests an overrepresentation of ethnic minorities at all levels of the juvenile justice system (Bishop & Frazier, 1996); however, much less research has examined such rates in status offenders. Of the studies that have explored the role of ethnicity or race among status offenders, there is a consensus that ethnic minority youth comprise a larger proportion of status offenders. This overrepresentation warrants additional attention to identify causes for such disproportionate numbers.

There is a paucity of research that examines the risk factors, protective factors, and service needs of minority youth. The current body of literature on status offenders does not identify potential differences in risk factors that may exist among ethnic minority youth, which likely means that the needs of some may be overlooked. For
instance, some minority youth may be more likely to live in poorer neighborhoods where violence is prevalent and may have increased exposure to traumatic events, such as witnessing or experiencing violence (Abram et al., 2004).

In a recent national study of adolescents, Kirkpatrick et al. (2003) found that African American youth were more likely to witness violence and to experience sexual assault, physical assault, and physically abusive punishment than White youth. However, Abram et al. (2004) failed to identify any differences in overall exposure to trauma by ethnicity, though it should be noted that their sample was comprised of a large group of youth in juvenile detention. Clearly, more work in this area is needed to clarify the occurrence and impact of trauma among youth of diverse backgrounds.

The research literature is scant regarding the mental health needs of ethnic minority youth. In general, mental health services are underutilized by ethnic minorities, likely due to barriers to quality services and limited access to culturally relevant treatment (Rawal, Romansky, Jenuwine, & Lyons, 2004). Similar trends of underutilization occur among justice-involved youth of color (Rawal et al., 2004), making it difficult to gain an understanding of the mental health needs of this population. Possessing a better understanding of trauma and mental health concerns of ethnic minority youth in the juvenile justice system can lead to identification of problems and appropriate referrals.

1.3.3 Gender and Ethnicity

With the above disparities in mind, it is essential that social scientists consider the impact that being both female and a person of color can have on youth who encounter the
juvenile justice system. Although the impact of ethnicity or race has been largely ignored in the research literature, some researchers have begun laudable efforts to focus on the roles of both ethnicity and gender. For example, Gavazzi and colleagues (2005) examined a sample of status offenders and reported differential risk factors for males and females. Females in this study reported higher risk on several domains, including family/parenting, peer relationships, substance abuse, mental health issues, accountability, psychopathy, exposure to traumatic events, and health-related risks. The instrument in this study includes cutoff scores that classify youth as low, moderate, or high risk on each domain. Gavazzi and colleagues (2005) also identified important differences between African American and White offenders. Specifically, they found that White youth reported higher levels of risk than African American youth on domains such as prior offenses, educational concerns, substance abuse, leisure activities, mental health issues, accountability, and exposure to traumatic events. In the same study, the authors explored differences in rates of completion of the diversion program, a court developed program that provided status offenders with a variety of services such as peer group counseling and health care. Results indicate unique outcomes for African American females, such as program completers had higher risk scores on peer relationships and health-related risk domains than African American females who did not complete the program successfully. Male completers did not exhibit such rates. These findings further supported the need for additional research that can identify important gender and racial differences that might exist among samples of status offenders.
1.4 Assessment

Because of the complex associations between demographics, risk factors, and youth behaviors, juvenile justice professionals have turned to assessment measures to facilitate decision-making, levels of supervision, and referrals to specific types of services (Gavazzi, Lim, Yarcheck, & Eyre, 2003; Young, Moline, Farrell, & Bierie, 2006). The types of assessment measures used in juvenile assessment have been classified by generation (Bonta, 1996; Ferguson, 2002). Young et al. (2006) provide summaries on 4 types of generational instruments. They describe first generation measures as the least sophisticated, relying solely on the “judgment and intuition of the individual conducting the assessment” (p. 137). The second generation of assessment tools is described as being more inclusive of standardized tools that gauge static risk factors, such as age of first arrest. Young and colleagues describe the third generation of assessment measures as containing a combination of static and dynamic risk factors. The fourth generation is thought to be more advanced because of its reliance on a series of instruments aimed at identifying needs in specific areas (e.g., education and drug use).

According to those analysts, first generation instruments rely solely on the professional’s judgment. Despite the development of more sophisticated and psychometrically sound instruments to assess juvenile needs and risk factors, many juvenile justice professionals continue to rely on their intuition and personal interactions with the youth (Gavazzi, 2006; Maupin, 1993). Of those who do use formal assessment measures, some of the instruments being used capture only limited information such as static factors (Young et al., 2006) or lack strong psychometric properties (i.e., reliability) for use among youth as they were developed for use in adult populations (Gavazzi et al., 2005).
In an effort to overcome these shortcomings, extensive work was done to develop the Global Assessment Risk Device (GRAD; Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003), a web-based instrument that incorporates both static and dynamic factors (Young et al., 2006) to assess the risk and needs of court-involved youth. The GRAD has been piloted among diverse samples of youth and can be considered a fourth generation measure that can be used to facilitate assessment of court-involved youth. The GRAD collects information on several areas of risk identified as relevant in the lives of court-involved youth, including exposure to trauma, family/parenting factors, and mental health.

1.5 Purpose of the Study

This study will critically examine the roles of gender and the impact of trauma among a sample of African American status offenders. Specifically, the researcher will conduct a descriptive cross-sectional research design on traumatic events among African American repeat status offenders. The main assessment tool in this study is the Global Risk Assessment Device (GRAD; Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003), an instrument that measures global risk across 11 domains relevant to court-involved youth. There are several aims of the study. First, the proposed study furthered the existing literature, by examining the prevalence rates and patterns of exposure to trauma among a sample of status offenders. Second, the study explored the psychological outcomes of victimization with respect to gender and ethnicity. Third, the study provided an increased understanding of the impact that exposure to trauma has on
other risk factors, such as mental health, and family/parenting domains among study participants.

1.6 Research Questions and Hypotheses

Research Question 1. Is exposure to trauma related to mental health risk among African American status offenders, as measured by the GRAD?

H-0a: There will be no relationship between exposure to traumatic events and mental health risk.

H-1a: There will be a relationship between exposure to traumatic events and mental health risk.

Research Question 2: Is mental health risk related to familial risk among African American status offenders, as measured by the GRAD?

H-0b: There will be no relationship between mental health risk and familial risk factors.

H-1b: There will be a relationship between mental health risk and familial risk factors.

Research Question 3: Is exposure to trauma related to familial factors among African American status offenders, as measured by the GRAD?

H-0c: There will be no relationship between exposure to trauma and familial factors.

H-1c: There will be a relationship between exposure to trauma and familial factors.
Research Question 4: Do African American female status offenders differ from African American male status offenders on exposure to trauma, as measured by the GRAD?

H-0d: There will be no gender differences in exposure to trauma.
H-1d: There will be gender differences in exposure to trauma.

Research Question 5: Do African American female status offenders differ from African American male status offenders on mental health risk, as measured by the GRAD?

H-0e: There will be no gender differences in mental health risk.
H-1e: There will be gender differences in mental health risk.

Research Question 6: Do African American female status offenders differ from African American male status offenders on familial risk factors, as measured by the GRAD?

H-0f: There will be no gender differences on familial risk factors.
H-1f: There will be gender differences on familial risk factors.

Research Question 7: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for females?

H-0g: Knowledge of exposure to trauma and family/parenting do not help predict mental health outcomes for females.
H-1g: Knowledge of exposure to trauma and family/parenting does help predict mental health outcomes for females.

Research Question 8: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for males?
H-0h: Knowledge of exposure to trauma and family/parenting do not help predict mental health outcomes for males.

H-1h: Knowledge of exposure to trauma and family/parenting does help predict mental health outcomes for males.

Research Question 9: Are traumatic events as measured by the GRAD distinguishable in terms of witnessing versus experiencing trauma?

H-0h: Traumatic events are not distinguishable in terms of witnessing versus experiencing trauma as measured by the GRAD.

H-1h: Traumatic events are distinguishable in terms of witnessing versus experiencing trauma as measured by the GRAD.
1.7 Definition of Terms

The following terms are offered for clarification:

1. **Caseload**: the total number of clients or cases on probation or under supervision with a given agency. (Peninsula Library System, 1993).

2. **Diversion**: A non-judicial alternative to trial used to refer a youth to social services such as counseling (Juvenile Justice FYI, n.d.). Diversion often occurs in less serious offenses when youth admits to responsibility and parents and youth agree to engage in alternative services (U.S. Supreme Court of Ohio, n.d.). Diversion has also been defined as, “the practice of officially stopping or suspending a case prior to court adjudication and referring the juvenile to a community education, treatment, or work program in lieu of adjudication or incarceration (Juvenile Justice FYI, n.d. p.1). Successful completion of a diversion program results in the dismissal or withdrawal of formal charges and those who fail to comply with the diversion terms and conditions are subject to formal prosecution (National Center for Juvenile Justice, 2004; U.S. Department of Justice, 2005).

3. **Intake**: The definition of intake varies from state to state, but in general it refers to a decision-making process for determining how a case will be handled. The intake process typically involves screening the police complaint “for legal sufficiency and making an initial determination regarding how it should be handled: formally or
informally” (National Center for Juvenile Justice, 2004, p. 4). Decisions are made by intake officers and/or prosecutors (National Center for Juvenile Justice, 2004).

4. **Specialized dockets:** Also called specialty courts and includes mental health, drug, and reentry dockets or courts. The docket is “focused on a single offense type and is characterized by closer judicial involvement with the offender, a treatment-team approach to rehabilitation, highly intensive supervision, comprehensive treatment of youth and family, a system of clear goals and rewards, and prompt interventions” (U.S. Department of Justice, 2005, p. 231).

5. **Status offender:** A juvenile who has committed an offense that would not be considered an offense if committed by an adult (i.e. truancy, runaway, incorrigible). (U.S. Department of Justice, 2005).

1.8 Limitations of the Study

There are several limitations to this research study. The first is external validity. The study relies on a specific sample of youth, such as African American status offenders in a metropolitan county in a Midwestern state and may not be applicable to other samples of offenders. Second, the power may not have been sufficient due to the small sample size and low effect size. Third, there may have been an underreporting of traumatic experiences as data were gathered in a structured interview by court personnel, and youth may have been uncomfortable disclosing such events. Fourth, the present study did not examine differences between court personnel, which may be a confounding factor in the study. It may be important to consider both individual differences in personnel and
demographic information of the person administering the survey as such factors can influence the youth. The fifth limitation is that the current study focused solely on the risk and needs of status offenders and may have missed important information regarding the role of protective factors among youth with a history of trauma. Inclusion of such information can inform preventative efforts by focusing on building resiliency in at-risk youth. Sixth, the current investigation utilized a sample of status offenders who were ordered by the court to attend alternative programming. Because of the involuntary nature of the youth’s participation, caution should be exercised in interpretation of results. The final limitation is the use of a cross-sectional research design as it focuses on data collection at one time point only and does not afford the researcher an opportunity to examine changes in risk due to programming. Despite these drawbacks, the current study is additive to the literature because it focuses on the role of trauma and family/parenting factors among youth who are involved in the justice system, and can inform efforts at programming by providing information on the link between trauma, mental health, and family/parenting issues among African American youth, an understudied population.

1.9 Summary

As research on risk factors among juvenile offenders has proliferated, some researchers have posited that demographic variables such as gender (Acoca, 1998; Gavazzi, Yarcheck, & Chesney-Lind, in press; Veysey, 2003) and ethnicity (Bishop & Frazier, 1996; Gavazzi, et al., 2005) warrant consideration. Some have argued that it is crucial to consider the gender of the offenders because of the differences that exist in pathways to the juvenile system (Belknap, 1996; Veysey, 2003), types and frequency of
offenses (Gavazzi et al., 2005), and the risk factors that often accompany the youth
(Funk, 1999). Examining gender and ethnicity among juvenile offenders can elucidate
disproportionate numbers of youth and specific risk factors that are more prevalent
among the youth. Such information can contribute to the understanding of etiology of
unlawful behavior, and can guide specific programming and treatment efforts to increase
efficacy of such interventions.

In sum, the research literature highlights a strong association between a history of
abuse among females and criminal activity. Because abuse rates are more prevalent
among females than males, attending to this issue during assessment can result in more
appropriate referral for treatment. It is vital to learn more about the needs of diverse
youth to increase chances for success in treatment. Due to the paucity of research on
ethnic minority youth, this population was examined in this study. Additionally,
examining gender in association with risk factors (e.g., mental health, family/parenting,
and trauma), can add to the current understanding of youth criminal behavior and
contribute to improving efforts in treatment.
CHAPTER 2

REVIEW OF THE LITERATURE

2.1 Introduction

Each year, two million youth are arrested in the United States, and over 106,000 are placed in juvenile detention and correction centers (Snyder & Sickmund, 1999). A substantial proportion of juvenile arrests are for status offenses (Snyder, 2005), or acts considered illegal because the “person committing them is of juvenile status” (Puzzanchera, Stahl, Finnegan, Tierney, & Snyder, 2004, p. 66). Status offenses include, but are not limited to, behavior such as running away, curfew violations, truancy, underage drinking, and being beyond the control of one’s parents (i.e., incorrigible or unruly). Precise estimates of annual status offense arrests are hard to obtain (Steinhart, 1996) because such rates are not tracked separately by the Federal Bureau of Investigation (FBI), but it is estimated that the proportion of status offenses has increased by over 100% since 1988 (Sickmund, 2000). Juvenile arrest rates have undergone some change in the last 25 years with arrest rates peaking in the mid 1990s (U.S. Department of Justice, 2006). Though overall juvenile arrests have declined in the last few years, there is still cause for concern because research has indicated that young offenders often have a constellation of risk factors that make them vulnerable to problems (McCabe et al.,
The consistent and steady increase of female arrests is also notable (Snyder & Sickmund, 2006). Such high rates of offending among all youth create a public health concern (Sondheimer, 2001) and efforts must be made to help prevent continual trends of unlawful behavior by learning more about youth who are engaged in such acts.

To help facilitate a better understanding of youth offending, researchers have made a concerted effort to identify characteristics common among offenders (Dembo et al., 1998; Gavazzi, 2006). To date, several factors that place youth at risk for future delinquency have been identified: exposure to trauma (Acoca, 1998; Chesney-Lind, 1997) offense history, problems with peers, family, school (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 1998), and mental health (McCabe et al., 2002). Furthermore, many youth who encounter the justice system present with a multitude of these risk factors, which indicates a need for appropriate assessment and intervention strategies. In addition to presenting with multiple risk factors, there is recent evidence that posits that male and female offenders present with different problems (Chesney-Lind, 2001, Dembo et al., 1998; Funk, 1999, Gavazzi et al., 2003; Timmons-Mitchell, Brown, Schulz, Webster, Underwood, & Semple, 1997). Before moving towards an in-depth look at gender differences, it is important to have a general understanding of the juvenile justice system.

2.1.1 Brief History of Juvenile Justice System

The United States’ juvenile justice system is constructed on a commitment to keep its citizens safe and on a philosophy of rehabilitation to help reform delinquent youth. The focus on rehabilitation came into favor during a period of social reform in the
United States (Feld, 2000). Prior to this time, children were viewed as miniature adults (Feld, 2000), and children over the age of seven-years-old were treated as adults in the justice system. This view gave way to the current philosophy that children are vulnerable and dependent on adults; thus, the juvenile court system was developed to approach delinquency from a framework that considered the developmental nature of youth (Feld, 2000) and the role of rebellion as a normal part of growing up. The first juvenile court was developed in 1899 in Illinois, and, within 20 years of its creation, all but three states opened similar juvenile court systems (Feld, 2000). Today, all fifty states and the District of Columbia have juvenile courts.

Since the Progressive era (1890-1920), the juvenile justice system has evolved and been impacted by policy changes, such as the landmark Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974. This federal act was pivotal because it moved to deinstitutionalize juvenile offenders and to separate juveniles from adult offenders (Juvenile Justice FYI, n.d.). During the late 1980s juvenile crime rates rose dramatically and hit a peak in 1994 (Juvenile Justice FYI, n.d.). As a preventive measure against continued increases in crime, a “get tough on crime” attitude was reinforced by legislature, including amending the act of 1974 to permit trying juveniles as adults for some violent crimes and weapon violations (Juvenile Justice FYI, n.d.). As these changes were implemented, the juvenile justice system seemed to imitate the adult justice system, despite its original philosophy. Such changes were made as juvenile justice professionals tried to recommit to the protection of citizens, at the expense of providing rehabilitation to youth. Despite these changes, one category of offenders, status offenders, has been the
focus of research because the nature of such offenses are typically non-violent and considered less serious than that of other juvenile offenses.

2.1.2 Status Offenses

Status offenses are youth behaviors brought to the attention of the juvenile justice system because the minor is engaging in an activity that is unlawful for someone not yet considered an adult (Feld, 2000). Examples of status offenses include, but are not limited to, running away from home, violating curfew, being truant, underage alcohol use, and being viewed as ungovernable. Status offenses occur at much higher rates overall than more serious crimes among youth. In 2000, a report by the U.S. Department of Justice indicated that running away from home comprised 59% of the juvenile arrests (Snyder, 2002), while more serious charges such as murder (5%) and rape (12%) were less prevalent.

Youth committing status offenses are often labeled as unruly or incorrigible, and such behaviors are thought to be indicative of mental health and interpersonal problems (Gavazzi et al., 2005). Because those problems are often contextual factors that are not directly linked with the legal system, this group poses a challenge to the juvenile justice system as professionals work to understand the etiology of offending and to address these risk factors (Funk, 1999; Gavazzi et al., 2005). In a recent study, Gavazzi and colleagues found that, compared to an at-large juvenile court sample, status offenders have significantly higher risk scores on several domains, including family, parenting, and education (Gavazzi et al., 2005). Gavazzi and colleagues also utilized an instrument that catalogs youth into low, moderate, and high risk based on endorsement of items
suggesting that those with high risk report more frequent and/or more severe experiences. The results of that study are very important because status offenders are often categorized as non-serious offenders, yet this group reported more severe levels of familial dysfunction and other risk factors. Thus, the behaviors associated with status offenses may be indicative of the underlying mental health and interpersonal problems experienced by the youth.

To address these relevant underlying issues, alternative treatments such as diversion programs (e.g., placements such as community-based programs as an alternative to placement in a detention center) and specialized dockets, courts designed to specifically address contextual factors (e.g., family problems, mental health, etc.) have been developed (Gavazzi et al., 2005). In keeping with the philosophy of the JJDP Act (1974), specialized dockets (e.g., mental health and drug courts for adolescents) tend to be more informal than traditional courts and strive to operate from a rehabilitative rather than a punitive framework. Theoretically, specialized dockets often provide an opportunity for youth’s interpersonal and mental health concerns to be addressed and considered in the programming or treatment that is provided. In reality, professionals from various jurisdictions do not always agree that such policies are carried out consistently, and some have even argued that acts, such as the JJDP Act (1974), actually have resulted in inconsistent treatment of status offenders. For example, some jurisdictions overlook status offenders, believing that processing such youth will result in negative labels which can further enhance their unlawful behaviors (Gavazzi et al., 2005). These scholars also suggest that other jurisdictions turn to community programming
while others treat this group more harshly by “bootstrapping” the youth with delinquency charges (Chesney-Lind, 2001; Gavazzi et al., 2005). Such variation in treatment coupled with the substantial number of status offenses that occur annually, warrants a closer, empirical look at this group and the contextual factors that may be correlated to their behaviors.

2.2 Pathways Leading to Juvenile Justice System

Understanding how youth come into contact with the juvenile justice system is important because this information could provide the basis for prevention and programming at vulnerable points, such as arrest (Leve & Chamberlain, 2004) and parole. It may also provide an opportunity to identify differential treatment of youth at entry into the system. There are multiple theories that hypothesize factors that may be relevant to the youth’s behavior (Agnew, 1992; Loeber & Stouthamer-Loeber, 1998; Veysey, 2003). For the purpose of this literature review, Veysey’s work was discussed as a way of framing the development of offenders with an inclusion of gender. More specifically, Veysey suggests that youth come into contact with the justice system through three pathways: (a) physical survival strategies (i.e., running away), (b) psychological survival strategies (i.e., emotional deregulation), and (c) by modeling behavior that is considered criminal. Utilization of such coping strategies are thought to be indicative of mental health problems and/or interpersonal issues (Gavazzi et al., 2005), family problems (Leve & Chamberlain, 2004), physical or psychological maltreatment (Egeland, Yates, Appleyead, & van Dulmen, 2002), poverty (Ruffolo, Sarri, & Goodkind, 2004), individual traits (Chesney-Lind, 2001), school circumstances (Dixon et
al., 2004), and history of substance abuse. Following this line of thinking, certain risk factors are likely connected to offending as youth often respond to circumstances with a limited repertoire of coping skills. While risk factors do not excuse delinquent behavior, they warrant attention. Knowledge and understanding of these factors can help clarify the etiology of offending, serve as a guide to decision-making, and inform programming and the development of prevention and interventions. Left untreated or ignored, such factors can result in recidivism or more severe criminal activities (Widom & Maxfield, 2001).

2.2.1 Mental Health and Status Offenders

In youth, disruptive behaviors are thought to be indicative of mental health problems (Rawal et al., 2004) because many youth may have a limited set of coping skills. Children may display behavior such as rebelling against parents, skipping school, and underage drinking as a means of coping with emotional and mental health difficulties and such behaviors result in contact with the justice system. Though it is not possible to determine causality, there is an association between mental health problems and problematic behaviors. According to the DSM-IV-TR (2004), about 20% of youth with current contact or a history of contact with the criminal justice system meet criteria for serious mental illness. Furthermore, the rates of mental health disorders among court involved juveniles are two to three times that of the general population (Lexcen & Redding, 2000), placing this group at additional risk. In 1998, Ulzen and Hamilton reported that more than half of incarcerated youth in their study had more than one diagnosable disorder. Similarly, McCabe et al. (2002) found that over two-thirds of
females and half of the males in their study suffered from at least one diagnosable mental health disorder.

With such prevalence rates among this population, mental health concerns have become the focus of empirical studies. Research on specific disorders has demonstrated that substance abuse, mood disorders (i.e., depression and bipolar disorder), disruptive disorders (i.e., conduct disorder and oppositional defiant disorder), anxiety disorders (i.e., generalized anxiety disorder and panic disorder), and post-traumatic stress disorder (PTSD) occur frequently among youth involved with the justice system (Berton & Stabb, 1996). Despite vast research literature on mental health problems in general, there is often no consensus on the etiology of many disorders. With this in mind, there is burgeoning evidence that suggests specific events impact the development of mental health issues. More specifically, it has been shown that youth with a history of traumatic events often suffer from mental health difficulties (Acoca, 1998).

2.2.2 Trauma and Status Offenders

The experience of trauma exists among an alarmingly high rate of youth in the juvenile justice system, and this is particularly true among females (Acoca, 1998). Some researchers have estimated that 54% (Chesney-Lind, 2001) to 92% (Acoca, 1998) of females in the juvenile justice system have experienced trauma. Interestingly, the impact of trauma is a complex issue, because it can impact youth in various ways; not all victims respond to abuse in the same manner. Some victims experience a delay in onset of symptoms, such as in PTSD, while others may develop unhealthy or dysfunctional thoughts about themselves as they try to assimilate the experience of trauma into their
concept of self. The aftermath of trauma varies from person to person, but many victims of abuse suffer from mental health and interpersonal problems. There has been a surge of research that has examined specific types of trauma, such as sexual and physical abuse.

Acoca (1998) argues that childhood sexual and physical abuse is “linked to lifelong health, learning, and behavioral disorders, including adolescent delinquency” (p. 562). As a result, Veysey (2003) attempted to clarify the complicated link between abuse/trauma and offending by examining the pathways to offending by victims of abuse, particularly female victims. Specifically, she theorized that victims of trauma often encounter the legal system as they try to cope with the trauma they have experienced. Such coping strategies include physical reactions (i.e., running away, reacting violently, etc.), psychological reactions (i.e., withdrawing from others, forming maladaptive schemas, increasing risk taking, etc.), and modeling maladaptive adult behavior (i.e., coping with conflict via violence, lacking respect for others, etc.) (Veysey, 2003). Some youth may react to abuse with violence, and subsequently become charged with assault. Such behaviors, though viewed as unlawful, may be the only solution the youth sees to protect them from continued exposure to abuse. These pathways represent potential explanations for the association between trauma, mental health problems, and criminality, and are not necessarily the only approaches used or the sole reason for a youth’s interaction with the juvenile justice system.

2.2.3 Witnessing Trauma

Germane to a discussion of trauma is the notion that witnessing trauma (e.g., violence) occurs quite often among youth and that such experiences can be deleterious to
youth (Crosby, Salazar, DiClimente, Yarber, Caliendo, & Staples-Horne 2004; Hilker, Murphy, & Kelley, 2005). Crosby and colleagues examined a sample of detained adolescent females and found that over 50% had witnessed violence (e.g., seeing a friend beaten, attacked, or hurt by others) in the last year. In their national study of youth in the general population, Kilpatrick and colleagues found that 43.6% of their national sample reported witnessing severe violence. For those youth, there were high rates of mental health problems, including post traumatic stress disorder and substance abuse. Specifically, among female youth that witnessed violence, 20.2% met criteria for PTSD versus only 4.2% of those who had not witnessed violence. Rates for males were lower as 11.2% of those who witnessed violence met criteria for PTSD versus 2.3% of those who had not. The authors note that the females who witnessed trauma were twice as likely to meet diagnostic criteria for PTSD as male counterparts. Rates for substance abuse were also concerning as rates for all youth who witnessed violence hovered around 17% versus about 4% of those who had not witnessed violence.

Similar research has been conducted in more specific samples of youth such as those in violent families (Rossman, Mallah, Dominguez, Kimura, & Boyer-Sneed, 1994) and traumatized urban youth (Saigh, Yasik, Oberfield, Halamandaris, & McHugh, 2002). Rossman et al. (1994) reported that youth who witness violence had higher scores of PTSD symptoms, higher levels of internalizing and externalizing problems, and difficulty in processing social information relative to those who did not witness violence. Similarly, Flannery, Singer, and Wester (2001) concluded that youth who engage in violent behaviors often have a history of exposure to traumatic events. The Saigh et al. (2002) study found somewhat conflicting results in that only traumatized youth who developed
PTSD suffered from more problems. Together, the aforementioned studies on exposure to violence suggest that it impacts a large number of youth, some of whom struggle with symptoms related to the experiences.

The aforementioned studies garnered support for the association between witnessing traumatic events, specifically violence, and negative outcomes among youth. As mentioned earlier, justice-involved youth may be at even greater risk for such exposure (Dodge, Bates, & Petit, 1990). Shahinfar, Kupersmidt and Matza (2001) examined this issue among a sample of incarcerated males and found that youth who witnessed extreme forms of violence, endorsed more favorable attitudes towards aggression as a social response. Similarly, Flannery et al. (2001) found that dangerously violent adolescents reported higher levels of exposure to violence than matched controls. Further analyses indicated additional gender differences among violent adolescents as females with exposure to violence report significantly higher levels of mental health problems than violent males.

Studies examining the impact of exposure to violence among youth have consistently demonstrated a relationship between witnessing such events and negative outcomes; however, how such experiences differ from the impact of direct victimization is less clear. A recent study, by Eitle and Turner (2002), seems to be the only one to date to directly examine differences that may exist between the experiences of victimization versus witnessing trauma. The researchers examined a representative sample of youth to determine if different types of trauma (i.e., receiving traumatic news, witnessing domestic violence, experiencing accidents, and being a direct victim of domestic and community-based violence) are associated with young adult crime. Results indicated that
direct victimization in the community (not domestic violence) was associated with criminal behavior. With regard to witnessing violence, only experience with community violence and traumatic news were associated with criminal behaviors. This study represented an important stride in understanding the impact of various types of trauma, and highlights a need for additional work to be done. Such work can attempt to overcome limitations in the current literature, such as reliance on general samples to understand criminal behavior (Eitle & Turner, 2002). The topic of witnessing violence represents an area in need of additional research as it seemingly occurs quite often. Whatever the relationship between being traumatized (i.e., as a witness and/or a victim) and offending, one fact is indisputable; abuse places all youth at increased risk for entering the justice system (Dodge et al., 1990).

2.3 Gender and Status Offenses

When examining the statistics of status offenders, it is vital to include a discussion of gender differences. Based on many studies, there is variability between male and female offenders, and their experiences with the juvenile justice system. How do female offenders compare to their male counterparts? This question is germane as female arrests have continued to rise steadily for the last twenty years (Juvenile Justice FYI, n.d.) and represent the fastest growing segment of this population. In a recent study, Snyder (2002) reported that females ages 13-15 accounted for one-third of the arrests in their age group. This statistic is important to consider, because some researchers have suggested that a strong relationship exists between age of first offense and severity of criminal behavior over time (Leve & Chamberlain, 2004). It is noteworthy to consider that, although the
arrest rates for all offenses declined for males between 1980 and 2000, the rates for females rose by 35%. Though some rates for females have continued to rise, rates for more serious crimes of violence have remained unchanged (Belknap et al., 1997). Additionally, as the crimes become more serious, the gaps between male and female rates for offending expand (Belknap et al., 1997). It is worth noting that this issue is complicated by the fact that females, as a group, experience differential treatment based on demographics such as harsher treatment of younger women and women of color (Belknap et al., 1997; Horowitz & Pottieger, 1991).

Research on the relationship between gender and status offenses has highlighted particular areas in which multiple differences exist among juvenile offenders. The research literature supports variation by gender in the following: pathways to juvenile justice (Funk, 1999; Rhodes & Fischer, 1993; Veysey, 2003), types of risk factors (Gavazzi et al., in press), types of offenses (Gavazzi et al., in press), and decision-making in the legal system and in the actual processing of cases (Bishop & Frazier, 1996). As rates for status offenses for females rise and disparities in serious offenses persist between genders, there is a critical need to recognize that gender plays a key role worthy of consideration in the juvenile justice system.

Disparities also exist in how youth enter the juvenile justice system. For instance, Rhodes and Fischer (1993) found that, among youth in a court diversion program, females were more likely referred by non-legal sources (e.g., parents) and brought to the court because of status offenses and personal problems. This may be another area where differences in gender persist as parents may operate on gender-specific expectations of children (Funk, 1999). It is quite likely that gender role expectations may lead to a greater
number of females being charged with status offenses. Specifically, there may be harsher consequences for female youth who violate parental control than for males. Chesney-Lind and Pasko (2004) expressed that the criminal justice system has repeatedly punished young women by enforcing harsh punishment when females violate expectations such as parental control. Young males are often not held to the same behavioral expectations, reflecting more about disparities in expectations than in actual numbers of status offenses. Several studies have compared arrests rates for status offenses with self-report measures and found that females are consistently overrepresented in status offense arrests (Figueira-McDonough, 1985; Teilmann & Landry, 1981). Some researchers posit that females are often treated more leniently than males (Belknap, 1996), except in the case of status offenses, where the opposite trend occurs. Chesney-Lind (2001) suggested that this is likely because status offenses often represent perceived lack of parental control and society continues to hold female youth to strict standards, consistent with more traditional gender roles.

With regard to type of offenses, Gavazzi and colleagues (in press) found that females are more likely to be charged with unruly and domestic violence charges and males are more likely referred for property and person-related offenses. Once offenders enter the system, some suggest that they are treated differently based on gender. For example, male juveniles are more likely to commit status offenses yet females are more often processed for such offenses (Chesney-Lind, 1997). Similar findings were reported by Rhodes and Fischer (1993) who used a modified version of the Self-Reported Drug Use and Delinquency Scale (Elliot, Huizinga, & Menard, 1989) to examine status offenses among a sample of youth attending a court diversion program. These results
suggest that differential treatment may be widespread, occurring in diversion programming as well as juvenile courts and calls into question reliance on theories and systemic issues that attempt to view male and female youth in the same manner. This is especially important to investigate as young females represent the most rapid growing segment of this population (American Bar Association, 2001). According to one source, the number of female offenders increased by 83% between 1988 and 1997 (Puzzanchera, 2002) and continues to rise. One strategy to better understand gender differences in status offenders is to examine variability in the type and frequency of risk factors among male and female youth involved with the justice system.

2.3.1 Gender and Risk Factors in Status Offenders

Risk factors present in female offenders have been found to differ from those in males. Specifically, females often encounter the court system with elevated risk factors in areas of family (Gavazzi et al., 2005), health issues (Acoca, 1998; Crosby et al., 2004; Veysey, 2003), mental health, and trauma/abuse (Funk, 1999; Gavazzi et al., 2005; Ruffolo et al., 2004). Funk (1999) argued that examining risk factors without considering the role of gender will result in misleading information because the smaller proportion of female offenders are likely reflected in overall scores on assessment tools, making males’ issues more salient. Gavazzi and colleagues (2005) reported additional findings, particularly that female study participants reported lower accountability (i.e., ownership of behavior), more peer problems, and higher risk on psychopathy than male counterparts. The authors further posited that the accountability scores may be indicative of self-perception of behaviors as coping or survival strategies. Youth may view their
actions as necessary to manage the stress they were undergoing and not see it as a violation of the law. Baer and Maschi (2003) suggested that accountability may be lower among offenders with a history of victimization because the youth attempt to mentally justify the trauma. If youth were traumatised and go on to commit unlawful acts, they may reframe how they view both events. This finding supported the need to examine risk factors individually for male and female offenders.

An additional variable that seemed to have differential rates for males and females is family/parenting. The extant literature highlights a link between a number of family factors and delinquent behavior (Gavazzi, 2006). Such factors include family cohesion (Cashwell & Vacc, 1996), attachment (Rankin & Kern, 1994), family history of substance abuse (Grant, 2000; MacNeil et al, 2005), parental mental health problems (VanDeMark et al., 2005), and parental monitoring (Patterson et al., 1992). For example, Cashwell and Vace (1996) conducted a study with over 600 adolescents to examine the role of family cohesion in adolescent delinquent behavior. The results indicated that, while deviant peer involvement was the strongest predictor of delinquent behavior, family cohesion had the largest direct effect on such involvement. Specifically, family cohesion appeared to influence youth’s choice of peer groups, which in turn predicted adolescent delinquent behavior. The researchers also examined separate path analysis for male and female participants and identified different predictors of delinquent behavior based on gender. For instance, family cohesion and deviant peer involvement emerged as a stronger predictor of delinquent behavior for male participants. Additionally, the results suggested that more adaptability (i.e., the ability to change in response to stress) by the family has a salutary impact on female youth with regard to delinquent behavior and a
detrimental impact on males. Further, this study indicated that the role of family is important when examining delinquent behavior, and family factors may exert different influences depending on the gender of the youth.

A study by Gavazzi, Yarcheck, and Lim (2005) found gender differences on the family/parenting domain in a study of youth assessed at a detention center. The family domain included questions about conflict, relationship with adults in the home, supervision of youth by adults, safety in the home, and economic hardship. Higher scores indicated more risk on family and parenting. More specifically, the authors reported that female youth (regardless of offense type) scored higher than male youth on the family domain. Interestingly, youth of both genders, who were charged with domestic violence charges, endorsed the highest risk on the family domain relative to their samples. These findings even suggested a link between violence and family factors, regardless of gender.

More recently, Gavazzi (2006) examined the role of gender, ethnicity, and family among youth involved with the justice system. The results indicated that African American females scored highest on the family/parenting domain, followed by Caucasian females. This finding is important because it highlights the differential risks based on both gender and ethnicity and highlights a need for additional work to further understand these relationships. Together, these studies provide evidence that family represents an important area of risk to examine among youthful offenders. It is likely that there are associations between violence in the home and familial risk factors, and both of these risk factors are likely to impact youth’s health, including mental health.

Contrary to female areas of risk, males tend to encounter the juvenile system with risk factors, such as prior contact with the system (Gavazzi et al., in press) and presence
of conduct disorder (McCabe et al., 2002). Peer rejection and aggression during childhood have been found to be strong predictors of subsequent delinquency for males (Miller-Johnson, Coie, MAumary-Gremaund, Lochman, & Terry 1999). Many of these risk factors are thought to be associated with mental health issues and such events may occur at differential rates in male and female offenders; thus, it is important to examine mental health and gender in status offenders.

2.3.2 Gender and Mental Health in Status Offenders

Some researchers have reported that mental health problems occur at various prevalence rates by gender among court involved youth. For instance, Timmons-Mitchell et al. (1997) found that 84% of young females, versus 27% of young males, displayed evidence of serious mental health problems. In their in-depth epidemiological study, Teplin, Abram, McClelland, Dulcan, and Mericle (2002) reported that an alarming 74% of young females in detention had symptoms that met criteria for a diagnosable mental health disorder. In addition, Ulzen and Hamilton (1998) suggested that girls are also more likely to meet criteria for more than one mental health disorder, which further complicates treatment and programming efforts. While the estimation of prevalence rates among juvenile delinquent youth varies, it is evident that addressing mental health concerns of these youth is critical so that appropriate interventions can be implemented.

2.3.3 Gender and Trauma in Status Offenders

As stated earlier, the occurrence of trauma has a strong association with youth encountering the juvenile system. Because females experience high levels of trauma and as the number of female juvenile offenders continues to rise (Acoca, 1998), gender is
critical in a discussion of risk factors among status offenders. In her review of over 950 case files of female status offenders, Acoca found that 92% reported one or more forms of abuse. Of these rates, 52% reported experiencing at least one form of sexual abuse. More striking are the even higher rates of abuse reported by young females who completed structured interviews in this study. Because of the sensitive nature of abuse, underreporting is likely common, particularly when one considers the lack of appropriate training court personnel and juvenile justice employees may have with regard to interviewing youth about delicate topics such as abuse. Identification of abuse is a prerequisite to being able to develop relevant treatment programming. Left untreated or offered inappropriate interventions, young female victims in the status offender population are likely to experience, “high rates of criminality, substance abuse, early pregnancy, and continued interpersonal violence” (Veysey, 2003, p. 3).

2.3.4 Theories of Female Offending

There is much debate in the research literature regarding the paucity of relevant theories on female offending (Chesney-Lind, 1989) and the implications of those involved in the juvenile justice system. Chesney-Lind further posited that making generalizations from a model of male offenders to understand female offenders is a flawed practice because it creates an “add women and stir approach” (p. 10) which lacks specificity to gender issues and assumes that no significant differences exist between these groups. Theorizing about females in this way has arguably resulted in generic programming (Veysey, 2003) that is ignorant of important variables that could aid prevention and intervention efforts. Early predictors of male delinquency are not as
effective when applied to females (Cauffman et al., 1998; Funk, 1999; Gavazzi, 2006). The focus on gender in juvenile justice has gained more attention in the last several years, as evident in the reexamination of the JJDP Act in 1992. Hearings held in conjunction with these changes addressed the double standard of juvenile and justice and the dearth of female-specific services. Subsequent changes, such as availability of federal funds to analyze gender-specific services, were made to reflect the specific needs of females in the system. Additional research is needed to further elucidate such needs and the impact of gender-specific services (see Belknap et al., 1997). It is necessary that this line of research continue so that more appropriate assessments, treatment, and interventions can be provided for female offenders, particularly with a history of abuse.

2.4 Ethnicity and Status Offenses

In addition to variability in the rates of offending between males and females, there is an overrepresentation of minority youth in the juvenile justice system (Bishop & Frazier, 1996; Gavazzi et al., 2005). Research suggests that such disparities begin to appear in the referral process (Leonard & Sontheimer, 1995) and persist at every stage of the juvenile justice system (Joseph, 2001). According to a recent report, White youth accounted for the majority of status offenses in four major categories of status offenses: runaway, truancy, ungovernability, and liquor (Puzzanchera et al., 2004). This source indicated that, from 1990-1999, White youth comprised 74% of runaways and African American youth comprised 22%. Under the truancy category, White youth comprised 71% whereas African American youth comprised 25%. Rates for ungovernability (Whites 72%; African Americans 26%) and liquor (Whites 90%; African Americans 5%)
also demonstrate higher number of Whites accounting for charges than African American youth. It is critical to note that the percentages for White youth are lower on the first three categories (i.e., runaways, truancy, and ungovernability) than the proportion of Whites in the general population; however, the rates on these categories are higher for African American youth in proportion to the overall number of African American youth in the general population. Thus, African American youth have rates lower than White youth for several types of status offenses but are still overrepresented among the offender population relative to rates in the general population. With this in mind, there is a burgeoning literature on this overrepresentation in the justice system at large, but there has been less examination of such rates among status offenders.

According to Pope and Snyder (2003), even when youth with no prior admissions to detention facilities were charged with the same offenses, African American youth were six times more likely to be incarcerated than Caucasian counterparts. According to one online source (Juvenile Justice FYI, n.d.), White youth were arrested for 72% of the crimes committed and comprised 79% of the youth population; Black youth were arrested for 25% of crimes and comprised 16% of the youth population. Estimates for other groups such as American Indians and Asian youth had crime rates more similar to their population rates. However, there is a growing body of evidence that indicates “racial and ethnic minorities, especially African Americans and Hispanics, are more likely to be arrested than their White counterparts” (Joseph, 2001, p. 229). This remains unchanged, regardless of the severity of the offense.

In their statewide study of youth offenders, both delinquent youth and status offenders, Bishop and Frazier (1996) found different outcomes for Non-Whites compared
to Whites depending on the type of offense (e.g., youth of color were treated more harshly except in the case of status offenses). More specifically, among the delinquent youth sample, nonwhites were more likely to be referred for formal processing than white youth and are also more likely to receive a severe disposition at each stage. The most pronounced differences between white and nonwhite youth occurred at intake. These findings are critical because the early decision making in the juvenile process likely impacts subsequent rulings, resulting in what Joseph (2001) refers to as a “snowball effect” (p. 233), particularly for ethnic minority youth. In other words, an ethnic minority youth who is treated harshly during an intake is likely to receive such treatment as he or she proceeds into the justice system because earlier charges often weigh into subsequent decision-making, creating even more challenges to the youth.

On the other hand, when examining the status offender population, Bishop and Frazier (1996) found that Whites were treated more harshly than Non-Whites. For example, the authors found that 36% of White youth, compared to 26% of Non-Whites, were incarcerated for contempt as repeated status offenders. Additionally, status offenders in this sample with prior records of offending are more likely to be referred for formal processing; therefore, unlike the delinquent sample, Whites, females, and younger youth are more likely to be referred to court. Although this trend conflicts with the findings in the delinquency cases, it should be noted that the race effect in this case is small; a Non-White status offender has a 9% probability of receiving a court referral compared to an 11% chance of a White status offender.

At first glance, such rates seem to offer promise in provision of equitable care for all youth; however, a close examination calls into question this interpretation. Bishop and
Frazier (1996) offer a possible explanation of this finding; they suggest that unlike
delinquency proceedings, status offenses are often approached from “the language of care
and protection” (p. 411), and incarceration, in this case, may be viewed as provision of
services and treatment to rehabilitate youth. In other words, youth of color are often
disadvantaged in both delinquency courts (i.e., where they receive harsher punishment)
and dependency courts or status offender proceedings (i.e., where they receive less
beneficent care). Additionally, some posit that legislative acts such as the JJDP Act of
1974, which set out to deinstitutionalize status offenders, benefits Caucasian males only
(Federle & Chesney-Lind, 1992). Belknap and colleagues argue that decisions often vary
based on gender and race. For example, they suggest that females are often redirected
towards mental health facilities and African American males are sent to the public system
of juvenile institutions, (Federle & Chesney-Lind, 1992) such as in secure facilities.

More recently, other researchers have found initial support that the
overrepresentation of ethnic minority youth also occurs in the status offender population.
Gavazzi et al. (2005) compared a status offender sample with an at-large court sample
and concluded that African American youth were “vastly overrepresented in the status
offender population” (p. 11). Clearly, these findings and the potential implications of
such disparities suggest a need for further exploration in this area so equitable and
accessible treatment is made available to all youth as early as possible.

2.4.1 Ethnicity and Mental Health among Status Offenders

Mental health issues are of concern for all juvenile youth, but the current research
literature provides little understanding of the mental health concerns of racial and ethnic
minorities. Some even suggest that there are different rates of mental health care utilization among ethnic minority youth. For instance, Belknap (1996) found that Caucasian youth had higher rates of prior and current mental health utilization than Hispanic and African American youth, which may be indicative of differential referrals to mental health services. Rawal and colleagues (2004) found that African American youth involved with the justice system, “displayed the highest level of mental health needs compared to Caucasian and Hispanic youth” (p. 250). Additionally, African American youth were likely to be underserved with regard to mental health needs. As evident in these findings, the mental health needs of ethnic minority youth involved in the juvenile system remains an area in need of future research so appropriate risk factors can be identified. The authors suggest that such differential rates in service utilization may be linked to stigma, alternative etiology of mental illness, cultural differences in receiving treatment, lack of access to care or poor quality of available care, as well as racial bias. Toward this end, the extant epidemiological literature does not provide much information regarding the prevalence rates of mental illness in court involved youth (Isaacs, 1992), which might help identify specific risk factors for ethnic minority youth.

2.4.2 Ethnicity and Trauma in Status Offenders

As stated earlier, the occurrence of trauma is often linked to mental health problems. The research body on trauma among ethnic minority youth specifically is limited, although one recent study on status offenders found that participants scored higher on the trauma domain (i.e., endorsing experiences such as physical or sexual abuse, neglect, witnessing violence, etc.) than Caucasian participants (Gavazzi et al.,
In a study of exposure to violence in urban adolescents, Berton and Stabb (1996) found that ethnic minority males reported higher exposure to violence than any other group. Although this study did not examine youth involved with the justice system, the high incidence of trauma exposure to ethnic minority males should be considered. The U.S. Department of Justice (2004) has also stated that adolescents living in urban areas are especially susceptible to being exposed to violence. As many ethnic minority youth reside in urban areas, it is important to be cognizant of their likelihood in being exposed to violence. This fact, coupled with the overrepresentation of ethnic minority youth in the juvenile justice system (Gavazzi et al., 2005; Steinhart, 1996), make a strong argument for studies that examine the impact that trauma has on this population.

2.4.3 Theories of Differential Offending

The cause of racial disparities among justice-involved youth continues to be debated in the literature. Some scholars argue that discrimination, racism, and selection bias by juvenile justice professionals are at fault, while others posit that actual differences in frequency and severity of offenses exist because “of the social and economic conditions in which they are forced to live” (National Coalition of State Juvenile Advisory Groups, 1993, p. 35).

Such information suggests that, despite the systems intention of fairness, there are two major concerns with the current approaches. First, the system overlooks the relevance of key characteristics, such as gender and ethnicity, which could inform specific programming to enhance the effectiveness of treatment. Second, the system continues to overlook the disproportionate numbers of ethnic minority youth in the
system. While perhaps the system intends to provide equitable treatment to all, it still fails to adequately address the role that race/ethnicity and gender have among offenders. More explicit efforts to provide impartial and evidenced-based treatment are critical if the juvenile justice system is to be successful at rehabilitating young offenders. There needs to be cognizance of the diverse risk factors and differential treatment of offenders, and consideration must be given to demographic factors.

2.5 Ethnicity, Gender, and Status Offenders

With the aforementioned disparities in mind, one must consider the impact that being both female and a person of color can have on youth who encounter the juvenile justice system. To date, research efforts, examining the role of both gender and ethnicity among status offenders, have been scarce. Among those who have taken this important step, findings indicate key differences when considering demographic information. For instance, Chesney-Lind (2001) reported that African American women had arrest rates threefold to their White counterparts, again reinforcing the overrepresentation of minorities in the justice system. In a recent study, Gavazzi and colleagues (2005) identified both gender and ethnicity differences in their study of status offenders. Specifically, they found that females exhibited higher risk levels than males and Caucasian participants displayed higher risk levels than minority participants on several domains. The sample utilized in that study were participating in a diversion program, or alternative programming that included counseling and related services. The authors also examined rates of program completion and identified some key differences between African American male and female offenders.
Examining the role of contextual factors such as ethnicity, race, and gender can inform knowledge about specific needs of youth in the justice system. Such efforts, together with the knowledge of overrepresentation of African American youth in the justice population, the strong association between trauma and offending, and the rising number of female offenders, provide an argument to continue examining these issues in empirical efforts.

2.6 Assessment

With the steady proportion of youth entering the juvenile justice system as status offenders, there has been a concerted effort to better assess both their needs and their level of risk. Research on risk factors among status offenders and repeat offenders have provided a knowledge base of relevant risk factors among this population. These factors include family and parenting characteristics, individual traits, prior offenses, school, mental health, trauma, substance abuse, peer group, and several others. Additional work has elucidated that males and females involved with the justice system score differently on various areas of risk (Funk, 1999; Gavazzi et al., 2005). Others have noted that some differences exist when one considers the race of the youth (Rawal et al., 2004). This research has led to the development of assessment tools utilized by many court systems to help determine length of time under the supervision of a parole officer (Gavazzi, 2006) and the level of treatment needed among youth with mental health concerns.

Additionally, some researchers have used such measures as predictive tools for recidivism by estimating likelihood of a youth reoffending based on his/her similarities to other known reoffenders (Funk, 1999). While early measures lacked strong psychometric
measures (i.e., reliability and validity) for use in the juvenile population (Gavazzi et al., 2005), more recent efforts have produced psychometrically sound instruments, including the Level of Service Inventory (Shields & Simourd, 1991), The Massachusetts Youth Screening Instrument (Grisso & Barnum, 2001), and the Global Risk Assessment Device (GRAD; Gavazzi, Beuttner, Partridge, Yarcheck, & Andrews, 2003). These instruments are crucial in research among this population because they can provide valuable data on similarities and differences that exist between youth on various domains. In 1999, Funk advised the use of separate examination of risk factors for males to avoid misleading information, since females are smaller in number and risk factors can be overlooked when analyzing them collectively. Thus, collapsing across gender assumes that risk factors are the same for everyone. It is also beneficial to examine the unique needs that may exist among youth of color.

The GRAD is a unique instrument, because it is a gender sensitive instrument with demonstrated validity and reliability among juvenile youth. Previous research, using the GRAD, has demonstrated males and females score significantly different on a number of risk domains (Gavazzi et al., in press). In a recent study, these researchers found that male and female youth involved with the juvenile justice system were brought to the detention facilities because of significantly different offenses. Specifically, Gavazzi et al. (in press) found that females were charged with more unruly domestic violence charges than their male counterparts who were more likely charged with property and person-related offenses. Additional analyses revealed significant differences in risk domains. For example, females scored higher on trauma, mental health, family/parenting, health-related, psychopathy, peers, and accountability. Toward this end, these findings have
specific implications for the justice system and relevant programming, as well as in primary prevention efforts. Because the mental health needs of youth of color have not been fully addressed in the research literature, it is important that researchers gather such data to increase the understanding of relevant needs. Assessment tools, such as the GRAD, offer promise to advance the knowledge about all youth involved with the juvenile justice system. Using psychometrically sound instruments can increase the quality and caliber of the research being done. Such research is extremely important as a means to contribute to the existing knowledge base and support the development of new theories which may better address some of the key issues discussed above, including the role of gender, ethnicity, trauma, and mental health among status offenders.

2.7 Summary

Status offenses comprise a significant portion of the legal cases handled in the United States each day. Juvenile courts were founded to help youth who encounter the legal system to become responsible citizens. Many of the children and adolescents who come into contact with the juvenile justice system have problematic family concerns, interpersonal, and intrapersonal difficulties. The current literature on status offenders suggest that important gender and ethnic differences exist among this population and warrant attention. For example, females are charged with status offenses more than males despite evidence that males are more likely to commit such offenses (Chesney-Lind, 2001). Other gender differences include the fact that female offenders have a greater likelihood of presenting to the court system with a history of trauma. Though the association between a history of trauma and offending is evidenced in recent literature
(Acoca, 1998), there remains a gap between this knowledge base and the accompanying treatments that exist for status offenders. Efforts must be made to utilize psychometrically sound instruments to better identify risk factors among both male and female status offenders of diverse racial backgrounds. Trauma has also been associated with mental health difficulties and familial concerns, and assessment efforts focusing on all of these areas can contribute to the understanding of status offenders and the programmatic efforts designed to treat such youth. Following such assessment, it is necessary to design, implement, and assess the outcomes of specific programming to better address the underlying factors and possible etiology of the unlawful behaviors.

In addition to gender differences, there is prolific evidence that ethnic minorities are overrepresented in the justice system, including status offenders. This disparity warrants additional research so equitable treatment of all youth is possible in the juvenile justice system. Steps must be taken to provide both gender-specific and culturally relevant treatment for status offenders in the United States. Quality research is needed to examine these issues and this author will propose a study to address this need in the literature. With this in mind, the author conducted a quantitative research study that examined the role of gender, trauma, mental health issues, and family/parenting among African American status offenders. Specifically, the current study was built on previous research efforts by utilizing a sample of status offenders from an urban county. More specifically, this study examined the association between traumatic history, mental health concerns, family, and demographic factors.
CHAPTER 3

METHODS

This study examined gender differences among African American status offenders on exposure to trauma, family/parenting, and mental health. Additionally, the study explored the contribution of exposure to trauma and family parenting to mental health outcomes. Finally, it explored more closely the measure of trauma, examining potential differences between trauma witnesses and trauma victims. Chapter 1 presented a brief overview of the research on status offenders, including demographic differences, along with a statement of the problem. Chapter 2 provided a review of the literature on status offenders and associated risk factors: exposure to trauma, family/parenting, and mental health. This chapter will present the methodological details of the study by describing the participants, procedures, instruments, and the research design and analysis.

3.1 Research Questions

Research Question 1. Is exposure to trauma related to mental health risk among African American status offenders, as measured by the Global Risk Assessment Device (GRAD; Gavazzi, Beuttner, Partridge, Yarcheck, & Andrews, 2003)?

Research Question 2: Is mental health risk related to familial risk among African American status offenders, as measured by the GRAD?
Research Question 3: Is exposure to trauma related to familial factors among African American status offenders, as measured by the GRAD?

Research Question 4: Do African American female status offenders differ from African American male status offenders on exposure to trauma, as measured by the GRAD?

Research Question 5: Do African American female status offenders differ from African American male status offenders on mental health risk, as measured by the GRAD?

Research Question 6: Do African American female status offenders differ from African American male status offenders on familial risk factors, as measured by the GRAD?

Research Question 7: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for females?

Research Question 8: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for males?

Research Question 9: Are traumatic events as measured by the GRAD distinguishable in terms of witnessing versus experiencing trauma?

3.2 Participants

3.2.1 Population

The population in which study participants were drawn included a total of 157 youth. These youth were ordered to participate in an “unruly respite care program”, developed by the court in a large Midwestern urban county. The program was developed
by the court’s internal task force in order to meet compliance with the federal regulations regarding the holding of status offenders. The program, designed for repeated status offenders, included a provision of services including residential treatment and a variety of therapeutic services such as individual and family counseling, psychoeducation, and peer group counseling (Gavazzi, Novak, Yarcheck, & DiStefano, 2003).

3.2.2 Sampling Method

In order to participate in diversion programming, several steps are necessary: (a) court personnel must make the appropriate referral, (b) youth must admit responsibility for the charges brought against them, and (c) the parents/guardians must agree to have youth participate (U.S. Supreme Court of Ohio, n.d.). Due to the nature of this process, the study utilized a convenience sample of youth.

Youth enrolled in the program engaged in an intake process with court personnel. The Global Risk Assessment was a standard part of this intake process.

3.2.3 Sample Size

Due to the nature of this research, a convenience sample was used because it was not possible to collect a random or systematic nonrandom sample. A total of 157 youth were referred to the alternative program by court personnel. The current investigation focused exclusively on African American youth, and resulted in a total sample of 70 participants. The youth ranged in age from 10 to 17, with a mean age of 14.77 years old.

The research literature posits that statistical power, or the ability of a statistical test to detect relationships among variables, is a key factor in conducting meaningful research (Cohen, Cohen, West, & Aiken, 2003). Although the current study utilized
existing data and therefore a predetermined sample size, it is important to conduct a power analysis to ensure that the sample used contained enough participants to achieve statistical power and maximize the probability of making correct statistical decisions. Power analysis requires information regarding effect size with regard to the constructs of interest. Unfortunately, information about effect size was not available in the existing literature and therefore an estimation of effect size was substituted. Cohen’s framework (1992) recommends using a medium (.15) to large (.35) effect size for regression analysis. The researcher used a medium effect size (.15). Utilizing a formula provided by Cohen et al. (2003), it was determined that 75.6 participants are needed to reach a power of .80. The actual sample size was 70, which can impact the probability of rejecting the null hypothesis when it is false. Despite reliance on existing data in this study, it is critical to consider the power (i.e., probability of rejecting the null hypothesis when it is false).

3.2.4 Demographic Information

Extensive demographic information was collected from each of the participants including information on age, ethnicity, school information (e.g., last grade completed), type of school, family socioeconomic status, mental health involvement, and family composition (e.g., single parent headed household, married biologically intact, etc.). Additionally, the youth responded to a set of demographic questions related to transitional risk factors (e.g., recent move, change in schools, loss of family member, etc.) and prior offenses such as the frequency of being stopped by law enforcement,
involvement in illegal activity, court appearances, and time spent in juvenile detention or lock-up.

3.3 Procedure

For the current study, the GRAD was administered as part of an intake assessment for repeat status offenders participating in a diversion program. Court personnel participated in a full day of training on how to administer and score the GRAD. The GRAD is intended to be conducted in a structured interview format, with the instruction varying slightly, based on which version is being used. Although the developers of this instrument created several versions of the instrument in order to collect multiple perspectives including child, adolescent, parent/caregiver, and professional, only the youth’s perspective will be considered in the current study. The restriction is for two reasons. First, the number of available professional and parent perspectives were limited in quantity. Second, the current study is interested in learning information about self-reports of traumatic events, which may be difficult to obtain from caregivers or parents. Additionally, previous research utilizing multiple perspectives has demonstrated significant differences between youth and adult reports (Gavazzi et al., 2005). As some parents or caregivers may be alleged perpetrators of youth violence, they may not answer honestly. For these reasons, only the perspective of the youth was used. The youth perspective is appropriate for use among young persons ages 11-19.

The court personnel are instructed to read each item verbatim to the respondent and the respondent chooses an answer from the three-point scale. The youth script is included in Appendix A. Utilizing this perspective relies on the child’s perception of
events, which can be very important when posing questions about how they experienced certain events. Additionally, having the court worker ask the questions overcomes limitations with regard to literacy problems that might exist for the youth. In addition to following the script, professionals administering the GRAD are also encouraged to provide additional information to participants if requested. For this study, court personnel participated in one full day of training on the use of the GRAD. According to Gavazzi et al. (2005), administration of the GRAD requires about 10 minutes for collection of demographic information and 25 minutes for the domain questions.

3.4 Instruments

3.4.1 Global Risk Assessment Device

The data collection instrument used in the study is the GRAD, a web-based instrument designed to assess risk on several indicators that may threaten the developmental needs of adolescents involved with the court system in various capacities (e.g., status offenders, chronic offenders, etc.) (Gavazzi, Slade, Buettner, Partridge, Yarcheck, & Andrews, 2003). The instrument was developed using a combination of items from existing measures and specially created items relevant to the measure’s intent.

The GRAD contains several important features. First, the GRAD utilizes a registration process that enables authorized individuals (i.e., court personnel and relevant child-serving agencies) to access information in the database. Passwords are required to protect non-authorized individuals from retrieving information from the GRAD. The GRAD is comprised of 132 items and 40 demographic questions, including age, gender, ethnicity, year in school, household income, and household composition. The GRAD
contains 11 risk domains: prior offenses, family/parenting, education, vocation, peer relationships, substance abuse, leisure activities, personality/behavior, traumatic events, psychopathy, accountability, and health-related risks. For each question, respondents are asked to consider how much each item applies to their life using a 3-point Likert scale where 0 = no/never, 1 = yes or a couple of times, and 2 = yes or a lot. According to S. M. Gavazzi (personal communication, March 15, 2006), this scale was created to be more informative than a dichotomous scale with a “yes/no” option by allowing respondents to endorse a “no” response, or two “yes” responses, which differ by frequency.

The developers of this instrument created cut-off scores, based on approximately 5,000 youth and families assessed by the GRAD, which categorize youth as low, moderate, or high risk on each of the 11 domains (Gavazzi, 2006). The scoring system is connected to relevant demographic information. The capabilities of the GRAD include the ability to report information in aggregate form to facilitate reporting of data (Gavazzi et al., 2005).

The Global Risk Assessment Device Version 1.0 (GRAD; Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003) used in this study was an updated version based on the original. The revisions of this instrument included creation of additional domains, such as exposure to traumatic events and health related concerns and supplementary questions that reflect “more female manifestations of problem behavior” (Gavazzi et al., 2003, p. 7). These scholars modified the instrument to reflect findings in the research. Such findings suggested key gender differences on risk factors (Funk, 1999), which are often overlooked in studies that collapse across gender.
3.4.2 *Validity of the GRAD*

Validity of the scale was established in several ways. Specifically, several published studies have established validity and reliability properties for the GRAD. In the original development of the GRAD, the authors replicated a confirmatory factor analysis of the psychometric structure of the GRAD across two independent samples. First, Gavazzi et al. (2003) examined a sample of 248 youth engaged in a family-based diversion program. The factor structure largely supported the existence of the following domains: prior offenses, family/parenting, education/work, peers, substance abuse, personality/behavior problems, and attitudes/orientation issues (Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003). For this sample, Cronbach’s alphas for each subscale ranged from .63 (Peer Relationships) to .90 (Family/Parenting). A second study using 373 youth and their families confirmed the use of these seven factors and produced support for an additional domain that comprised items related to leisure. The Cronbach’s alphas for each subscale in this sample ranged from .87 (Prior Offenses) to .97 (Family/Parenting), which is comparable to earlier studies (Gavazzi & Lim, 2003).

Gavazzi and Lim (2003) examined concurrent validity by using a subsample of the first study mentioned above (Gavazzi et al., 2003). The authors conducted correlations of the GRAD domains with other reputable measures associated with their content. They found evidence for the concurrent validity of the family/parenting domain, as it was significantly correlated with the Unpleasant Family Events Scale (Patterson et al., 1992) \( (r = .39, p < .02) \). Concurrent validity \( (r = .35, p < .03) \) was also demonstrated
for the mental health domain of the GRAD by comparing it to the Brief Symptom Inventory (Derogatis, 1993). To date, no concurrent validity studies have been conducted on the exposure to trauma domain.

The predictive validity of the GRAD is evidenced in a study of 224 families of adolescents involved in the justice system (Gavazzi, Lim, Yarachek, & Eyre, 2003). This sample was part of the earlier study described above ($N = 373$). Specifically, these authors compared GRAD scores on 8 domains between parent-reported GRAD scores and referral by intake officers to services. Youth who were referred to mental health counseling or services were coded as “high” in intensity and youth who received referrals for less intensive services were coded as “low” in intensity. Results revealed that those youth considered “high” intensity had mean scores significantly higher than the “low” intensity group ($t = 4.53, p < .001$) The authors also conducted a discriminant analysis to assess whether youth referred to mental health services could be differentiated from recipients of less intensive services. Results indicate that 72% of the cases were correctly classified, 22% of those who scored high on the GRAD did not receive mental health services, and 6% of the cases received mental health referrals even though GRAD scores were considered low in risk. These results provide some preliminary evidence of predictive validity for the GRAD.

3.5 Variables

3.5.1 Independent Variables

There are three independent variables in this study: gender, trauma, and family/parenting. Gender is a categorical variable with two levels: male and female. For
the purposes of this study, trauma and family/parenting were considered conceptually continuous variables, and were treated and measured on interval scales.

Many psychological measures do not fall neatly into one of the four basic measurement scales (i.e., nominal, ordinal, interval, and ratio scales) identified by Stevens (1946). There is some controversy as to the use of interval scales in social sciences instruments (Newton & Rudestam, 1999), because it is debatable as to whether the differences in ratings are actually equidistant (Bordens & Abbott, 1996); however, there is an argument that such ratings have more precision than ordinal scales. Although social science variables, such as depression, may not completely fit the criterion to be measured on interval scales, many researchers consider it acceptable to treat such measures as though they have full interval properties (Bordens & Abbott, 1996). Borghatta and Borhnsedt (1981) argue that many variables in the social sciences are conceptualized as continuous variables, despite the way tests are constructed. For the current study, exposure to trauma, mental health and family/parenting are considered continuous independent variables that are measured on interval scales.

3.5.2 Dependent Variable

The dependent variable in this study is mental health. Mental health was measured using a domain of the GRAD (Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003). Mental health in children is defined as, “how children function psychologically on a day-to-day basis—how they think, feel, and act. The way they relate to others, feel about themselves, handle stress, and make choices are important components of mental health” (Nimmo, 2000, p. 2). Mental health was measured using a
subscale of the Global Risk Assessment Device and examines the occurrence of mental health concerns among youth. The mental health subscale is comprised of 26 items. An example of this domain is, “Do you have difficulty controlling your anger?”

3.5.3 Predictor Variables

*Gender.* Gender is a dichotomous, categorical variable. Dummy codes were created with females coded as “1” and males coded as “2”.

*Exposure to Trauma.* The trauma domain was considered on an interval scale and reflects the mean of the 12 items that comprise this subscale of the GRAD (See Appendix B).

*Family/Parenting.* The family parenting domain was considered on an interval scale and reflects the mean on the 17 items that comprise this subscale of the GRAD (See Appendix C).

3.5.4 Outcome/Criterion Variable

The mean mental health score is considered the outcome variable in the regression analysis. Mental health as measured by the GRAD was considered an interval scale (See Appendix D).

3.6 Research Design

The current investigation is a descriptive cross-sectional research design examining traumatic events and family/parenting risk among African American status offenders. The researcher used existing data from structured interviews. Survey research, conducted through structured interviews, has several advantages. First, data could be
collected from individuals who would otherwise be unable to participate, such as respondents that are illiterate or blind (Bernard, 2000). Additional benefits included the opportunity to provide respondents with clarification in the instance that they do not comprehend a question or require additional information in order to answer. A third benefit of structured interviews was that the interviewer possessed control over exposure to additional questions on the survey and could reduce the occurrence of skipping items more easily (Bernard, 2000). A final advantage of this type of survey research was that the interviewer knew the identification of who completed the surveys because it was conducted in person (Bernard, 2000).

Like all types of research, structured interviews conducted in person are not without limitations. First, this format of inquiry can be intrusive and may inhibit a respondent from answering sensitive questions honestly (Bernard, 2000). The protection of anonymity does not occur in the same fashion as face to face interviews. There may be a greater likelihood to answer the interview questions in a socially desirable manner to appease the interviewer. Another disadvantage is the cost involved, with regard to both time and money (Bernard, 2000). Despite these drawbacks, structured interviews were utilized in the current study and resulted in high response rates, completed surveys, and greater control by the interviewer.

The intent of the current study is to examine the following: frequency of traumatic events among youthful offenders, associations that trauma has with other risk factors (e.g., mental health and family/parenting), and the impact of gender among African American status offenders. Finally, a closer examination of the trauma scale was
evaluated. The experience of witnessing trauma was compared to the experience of direct victimization with regard to mental health.

3.7 Threats to Validity

As in any research on human behavior, one can not exert control over all possible extraneous threats and thus must balance the amount of control in the study with the degree to which the findings can be generalized. This is especially true in counseling research that examines mental health because the researcher must choose between tightly controlled experimental designs and methods that are less rigorous but possibly more applicable to natural settings. Dixon and Dixon (1993) commented that, when it comes to internal and external validity, “It becomes clear that the counseling researcher is involved in a trade-off” (p. 700). It is the responsibility of the researcher to take every precaution available to ensure the highest possible level of research integrity; thus, validity concerns must be adequately addressed (Black, 1993).

3.7.1 Internal Threats to Validity

Internal validity refers to the ability of your research to “adequately test your hypothesis” (Bordens & Abbott, 1996, p. 67). In other words, internal validity refers to how well your research design can test the intended hypotheses. Threats to internal validity are most often discussed in regard to experimental studies; however, confounding variables can also impact the findings in other types of research (Bordens & Abbott, 1996). It is plausible that the current study suffers from the selection bias threat due to the nature of the study design. Random selection was not possible in this study and the researcher relied on a sample of convenience which may result in bias around those who
entered the treatment program at the time of the data collection. An additional threat to internal validity is that of measurement error. Measurement error can occur for several reasons including unclear survey items, socially desirable responses on the part of the respondents, and utilization of an instrument that is invalid with the sample studied or lacks reliability (Dillman, 1991; Gliem, 2005; McCracken, 2002). The GRAD, used in this study, has sufficient psychometric properties and was designed to be used exclusively in court samples like the one used in the current study. Measurement error was reduced by the reliance on the structured interview format, which eliminated confusion respondents may have experienced with regard to GRAD items. This format enabled the administrator to clarify any necessary items for respondents (S.M. Gavazzi, personal communication, March 15, 2006). A final threat to internal validity is the power in the current study. Since extant data was used, the researcher was unable to increase the sample size to the recommended number ($N = 76$) to reach a power of $.80$.

3.7.2 External Threats to Validity

External validity in research is the degree that results can be extended beyond the research sample and setting in which they were obtained. In other words, external validity refers to the generalizability of the research findings to the larger population (Campbell & Stanley, 1963). The major threat to external validity, in the current study, is the possibility of a lack of representativeness of the sample (Black, 1993). This threat occurs, when the effects of the research only apply to those included in the study. The current study included a specific sample of African American status offenders in an urban county in a Midwestern state, therefore limiting the generalizability to other groups. A second
potential threat to external validity is the non-response error (Bordens & Abbott, 1996). This validity threat occurs when participants in a sample do not respond to a survey or questionnaire and potentially differ from those participants who chose to be included in the study. The current study intended to overcome this problem, due to the inclusion of all youth who were referred to the diversion program. The choice of such a sample had limits (e.g., generalizability) as well as benefits (e.g., small likelihood of nonresponse and frame errors).

3.8 Statistical Analysis

Research questions were analyzed using the most recent version of the Statistical Package for the Social Sciences (SPSS 14.0, 2005). The first steps of data analysis include the examination of the reliability of the sample data. This was conducted by calculating Cronbach’s alphas to identify internal reliabilities for the GRAD domains (exposure to trauma, family/parenting, and mental health). For the sample of youth in this study (\(N = 70\)), Cronbach’s alphas ranged from .67 (Family/Parenting) to .74 (Exposure to Trauma) to .85 (Mental Health).

Due to the limitations of the study and the exploratory nature of some analyses (e.g., factor analysis for trauma), data analysis began with a close inspection of the data. Utilizing graphical representations of data early in analysis has been recommended (Tukey, 1977; Newton & Rudestam, 1999) in order to identify initial problems. Data inspection was carried out using histograms. Histograms offer the researcher the opportunity to view the raw data for a variable in a graphical and simplistic manner. The specific steps taken to rule out violations of assumptions are discussed below in the
regression section. Following this initial inspection of the data, descriptive statistics were calculated.

Following data inspection, descriptive statistics were conducted on the demographic information and the following GRAD domains: (a) exposure to trauma, (b) family/parenting, and (c) mental health. Means and standard deviations of the GRAD indicators were considered by gender.

The next set of analyses was to examine interrelations between the constructs of interest: trauma witness, trauma victim, family/parenting, and mental health. Pearson product-moment correlations were used to examine these relationships. Intercorrelations were conducted and are displayed in a correlation matrix (See Table 4.3). Because of the expected gender differences, correlations are listed separately for males and females. This set of analyses addressed research questions 1-3.

Multivariate statistical analyses were used to examine research questions 4-6, the group differences (males and females) on the dependent variables. Multivariate Analysis of Variance (MANOVA) was chosen for its ability to simultaneously analyze several dependent variables as well as any relationships between the variables (Newton & Rudestan, 1999). The main reason for choosing MANOVA over a series of ANOVAS is because of MANOVA’s ability to reduce Type I error (Sapp, 1999; Stevens, 2002). Additionally, MANOVA is considered appropriate when examining independent variables that may be conceptually related (Huberty & Morris, 1989). It is likely that the constructs of interest (i.e., exposure to trauma, family/parenting, and mental health) are not conceptually independent variables; therefore, MANOVA is the appropriate statistical test to explore the probable intercorrelations and the relative contributions of the
variables. Additionally, the MANOVA assesses both overall effects in a study as well the independent contribution of each outcome variables to group differences. Before conducting the statistical analysis, the researcher tested the assumptions associated with MANOVAs: (a) the observations must be independent, (b) the variance-covariance matrices must be equal for all groups, and (c) the set of dependent variables must follow a multivariate normal distribution.

Because gender differences were expected to emerge on the three domains of interests, separate univariate regression analyses were conducted to examine how well exposure to trauma and family/parenting predicted mental health scores for African American youth (research questions 7 and 8). Regression analyses offer the researcher the ability to produce a linear combination of independent variables that predict the dependent variable as closely as possible. As a first step, the researcher tested for violations of the assumptions of regression: (a) normality, (b) linearity, (c) homoscedasticity, and (d) multicollinearity. As mentioned above, histograms were utilized to test for normality of the data. The researcher used scatterplots to test linearity. Levene’s test for homogeneity was used to detect homoscedasticity and Box’s M test for variance-covariance. Finally, in order to assess multicollinearity, or the presence of highly correlated (> .90) predictor variables, the researcher calculated a correlation matrix which demonstrated the associations among the variables (Newton & Rudestam, 1999).

In the proposed study, the regression produced a linear combination of exposure to trauma and family risk factors that predict, as closely as possible, the mental health outcome. Stepwise univariate regression was used in this study because while mental
health and exposure to trauma are both believed to impact mental health scores, the 
previous literature does not specify which construct has more impact on mental health 
outcomes. Thus, other types of univariate regression analyses, such as hierarchical 
regression, are not appropriate in the current study.

Regression analyses have several limitations worth noting. First, a regression 
analysis relies on sum of squares, mean, and variance, which make it susceptible to 
problems when using non-normal and/or nonlinear data. Another drawback is that 
regression analyses are impacted by sample size, such that attenuate correlations can 
appear significant if large samples are used; however, the sample size in the proposed 
study was not large and therefore probably not problematic in this way (Walker, 1999).

Finally, the researcher conducted an exploratory factor analysis (EFA) on the 
trauma domain of the GRAD. The trauma domain is of particular interest in the proposed 
study and there is some research literature to support that individuals who witness trauma 
(e.g., seeing violence in the home or community) in addition to those who experience 
direct victimization may both be traumatized (Bell & Jenkins, 1991). There is a gap in the 
research regarding whether specific differences exist between these two types of trauma. 
The trauma indicator in the current study contains items regarding experiences of 
witnessing trauma and experiences of direct victimization. Factor analysis was used to 
identify underlying dimensions within this scale. Specifically, the researcher utilized 
exploratory factor analysis to examine the presence of a trauma witness subscale and a 
trauma victim subscale.

Using SPSS version 14.0, the researcher conducted an exploratory factor analysis 
(EFA). EFA is a procedure that explores the loadings of variables in an attempt to
achieve the most parsimonious model (Walker, 1999). Several steps recommended by Walker (1999) were followed. First, univariate analysis of the trauma domain was conducted. This step is to ensure that the data are normally distributed. Second, preliminary analyses, including a Bartlett’s Test of Sphericity and an anti-image correlation matrix, were used to make sure that the data and variables were appropriate for the factor analysis. A measure of sampling adequacy (MSA) was also examined. Next, two factors were extracted from the 12 items comprising the exposure to trauma scale, yielding an unrotated factor loadings matrix. An orthogonal rotation was conducted on the unrotated factor loading matrix, in order to facilitate interpretation. The rotation criterion used in this study was VARIMAX. The purpose of the VARIMAX procedure is to simplify the columns of the factor matrix by limiting the number of high loadings in each column as much as possible.

The current study works to contribute to this area of need by conducting an EFA on the trauma subscale of the GRAD. Furthermore, researchers who have used the GRAD have not explored the trauma subscale in depth, making the current exploratory analyses important in furthering the knowledge about this subscale. For these reasons, the researcher conducted an EFA to identify which items can be condensed into a smaller set of factors with a minimum loss of information (Hair, Anderson, Tatham, & Black, 1998).

3.9 Research Questions

Research Question 1. Is exposure to trauma related to mental health risk among African American status offenders, as measured by the GRAD?
Research Question 2: Is mental health risk related to familial risk among African American status offenders, as measured by the GRAD?

Research Question 3: Is exposure to trauma related to familial factors among African American status offenders, as measured by the GRAD?

Research Question 4: Do African American female status offenders differ from African American male status offenders on exposure to trauma, as measured by the GRAD?

Research Question 5: Do African American female status offenders differ from African American male status offenders on mental health risk, as measured by the GRAD?

Research Question 6: Do African American female status offenders differ from African American male status offenders on familial risk factors, as measured by the GRAD?

Research Question 7: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for females?

Research Question 8: Does having knowledge of exposure to trauma and family/parenting help predict mental health outcomes for males?

Research Question 9: Are traumatic events as measured by the GRAD distinguishable in terms of witnessing versus experiencing trauma?

3.10 Research Hypotheses

1. Risk scores on the exposure to traumatic events domain will be significantly related to scores on the mental health domain. More specifically, higher levels of traumatic events will be significantly associated with higher risk scores on the mental health domain.
2. Risk scores on the mental health domain will be significantly related to scores on the family domain. More specifically, youth with higher scores on the mental health domain will report higher scores on the family domain.

3. Risk scores on the trauma domain will be significantly related to scores on the family domain. More specifically, youth with higher scores on the trauma domain will report higher scores on the family/parenting domain.

4. Gender will significantly impact exposure to traumatic events. More specifically, females are significantly more likely to report exposure to traumatic events on the GRAD than males.

5. Gender will significantly impact scores on the mental health domain. More specifically, females are significantly more likely to report mental health risks as measured by this GRAD domain.

6. Gender will significantly impact the scores on the family/parenting domain. More specifically, females will report higher scores on the family/parenting domain than males.

7. Scores on the family and trauma domains of the GRAD will be predictive of risk scores on the mental health domain for female African American status offenders.

8. Scores on the family and trauma domains of the GRAD will be predictive of risk scores on the mental health domain for male African American status offenders, but to a lesser degree than for females.

9. Exploratory factor analysis will reveal two underlying factors on the trauma domain: trauma witness and trauma victimization.
CHAPTER 4

RESULTS

This chapter begins with a description of the sample. Descriptive data includes means and standard deviations for domains of interest: trauma, family/parenting, and mental health, as measured on the Global Risk Assessment Device (GRAD; Gavazzi, Beuttner, Slade, Partridge, Yarcheck, & Andrews, 2003). Salient aspects of the graphical analyses were included to elucidate the summary statistics. Additionally, intercorrelational matrices for the variables were presented and noteworthy findings were also identified. Finally, statistical test results of the research hypotheses were presented.

4.1 Participants

Potential participants included all youth who were referred to the diversion program ($N = 157$). The focus of the current study was on African American youth exclusively, resulting in a final sample of 70 participants. The sample was 65.7% ($n = 46$) female and 34.3% ($n = 24$) males. As intended, all of the participants in this research study were African American (100%).

4.2 Descriptive Statistics and Graphical Analyses

On average, the participants were 14.7 years old ($SD = 1.4$), with a range of 10 to 17. The sample included youth who reported highest grade levels as ranging from third grade to eleventh grade. High school students comprised 45.7% of the sample. The
majority (52.8%) of the remaining students reported the highest grade completed as being middle school (e.g., 6th, 7th, 8th grades), and 11.4% reported an elementary school grade as the highest completed level (see Table 4.1).

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd grade</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>6th grade</td>
<td>7</td>
<td>10.0</td>
</tr>
<tr>
<td>7th grade</td>
<td>12</td>
<td>17.1</td>
</tr>
<tr>
<td>8th grade</td>
<td>18</td>
<td>25.7</td>
</tr>
<tr>
<td>9th grade</td>
<td>20</td>
<td>28.6</td>
</tr>
<tr>
<td>10th grade</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>11th grade</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1: Last Grade Completed (N = 70)

Other relevant demographic information about the study participants includes household composition and family socioeconomic status. Of the total sample, 48.6% (n = 34) of youth reported living in a household comprised of a single-parent (mother), 15.5% (n = 11) reported “other”, 11.4% (n = 8) grandparents, 11.4% (n = 8) single-mother headed with boyfriend, 5.7% (n = 4) married, 4.3% (n = 3) stepfamily, and 2.9% (n = 2) single-parent headed (father). This information is presented in Table 4.2.
<table>
<thead>
<tr>
<th>Household Composition</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-parent headed (mother)</td>
<td>34</td>
<td>48.6</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>15.7</td>
</tr>
<tr>
<td>Single-mother headed with boyfriend</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>Grandparent</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>Married</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>Stepfamily</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>Single-parent headed (father)</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2: Household Composition ($n = 70$)

Annual household income was not assessed for the majority of participants (55.7%). Of those who reported this information, 25.7% ($n = 18$) reported a household annual income of between $0 and $4,999, and 18.6% ($n = 13$) reported an annual income ranging between $5,000 and $14,999.
Data inspection included examining participants’ responses on the dependent variable (mental health). The researcher evaluated the data, using a scatterplot, and did not find any outliers in the data; therefore, all respondents’ scores were included in the subsequent analyses. Specific data inspection is discussed later with regard to testing assumptions of the statistical tests used.

The domains of interest in this study are exposure to trauma, family/parenting, and mental health, as measured by the GRAD (Gavazzi, Slade, Beuttner, Partridge, Yarcheck, & Andrews, 2003). The relationships of these variables to each other are displayed in the correlation matrix in Table 4.3.

<table>
<thead>
<tr>
<th></th>
<th>Family/Parenting</th>
<th>Mental health</th>
<th>Exposure to Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.67a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>.62**</td>
<td>.85a</td>
<td></td>
</tr>
<tr>
<td>Exposure to Trauma</td>
<td>.43**</td>
<td>.51**</td>
<td>.74a</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed) \((n = 70)\)

a Internal reliabilities (Cronbach alpha coefficients) are written on the diagonal.

Table 4.3 Intercorrelations and Internal Reliabilities of the Family/Parenting Domain, Mental Health Domain, and Exposure to Trauma Domain.
Examination of this table indicated interrelationships among all combinations of these variables. Specifically, the correlations between trauma and family/parenting indicated a strong relationship ($r = .43 \ p < .01$). Trauma has also indicated a strong relationship with mental health ($r = .51, \ p < .01$). Finally, family/parenting and the mental health variable also shared a strong association ($r = .62, \ p < .01$). The strength and significance of these relationships supported the decision to consider these variables as being conceptually related, which indicated that multivariate analysis of variance (MANOVA) was the statistic of choice.

Because of the anticipated gender differences, correlations among exposure to trauma, family/parenting, and mental health are displayed separately for males and females in Table 4.4. As evidenced in this table, the relationships among variables are statistically significant for both males and females, but the intercorrelations for males are higher than for females and when all participants are included.
Table 4.4 Intercorrelations for Males (Upper right diagonal) and Females (Lower left diagonal) on the Family/Parenting Domain, Mental Health Domain, and Exposure to Trauma Domain.

<table>
<thead>
<tr>
<th></th>
<th>Family/Parenting</th>
<th>Mental health</th>
<th>Exposure to Trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.68**</td>
<td>.65**</td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>.56**</td>
<td>.59**</td>
<td></td>
</tr>
<tr>
<td>Exposure to Trauma</td>
<td>.33*</td>
<td>.49**</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Assumptions of the Multivariate Analysis of Variance (MANOVA)

Prior to the statistical analyses, the assumptions of the general linear model of multivariate analysis were tested to determine if the following assumption of the test were valid: (a) the observations must be independent, (b) the variance-covariance matrices must be equal for all treatment groups, (c) the set of dependent variables must follow a multivariate normal distribution.

4.3.1 Assumption 1: The observations must be independent.

The data collected for this research occurred on different days depending on the youth’s entry into the program. The data collection relied on structured interviews in which standard procedures were followed. Each youth met with a court employee individually to complete the instrument. The physical space in which the instrument was...
completed was private and quiet. The instructions for completion are worded carefully to provide succinct explanations to youth.

4.3.2 Assumption 2: The variance-covariance matrices must be equal for all treatment groups.

An examination of the amount of variance between groups (i.e., males and females) was conducted. Using Levene’s test of equality for error variances, the researcher determined that the two groups did not contain substantial differences in the amount of variance for any of the variables considered (Table 4.5). The differences in variances between the two groups indicated overlapping confidence intervals, which means the groups are not considered to have statistically different variances.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Df1</th>
<th>Df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.01</td>
<td>1</td>
<td>64</td>
<td>.92</td>
</tr>
<tr>
<td>Mental health</td>
<td>1.15</td>
<td>1</td>
<td>64</td>
<td>.29</td>
</tr>
<tr>
<td>Exposure to trauma</td>
<td>1.01</td>
<td>1</td>
<td>64</td>
<td>.32</td>
</tr>
</tbody>
</table>

Table 4.5 Levene’s Test of Equality of Error Variances

Tabachnick and Fidell (2001) suggested that researchers using unequal sample sizes also test the homogeneity of variance-covariance using the Box $M$ test. As seen in Table 4.6, the test indicated that homogeneity of variance-covariance assumption was not violated ($p = .66$).
4.3.3 Assumption 3: The set of dependent variables must follow a multivariate normal distribution.

In testing this assumption, the researcher created a histogram (Figure 4.1) to display scores on the dependent variable (mental health). Observations indicated that the scores on the dependent variable generally follow a normal distribution.
Figure 4.1: Frequency Chart of Mental Health Scores of Respondents \( (n = 70) \)

4.4 Assumptions of Univariate Regression Analysis

Prior to the statistical analyses, the assumptions of univariate regression analysis were tested to determine if the regression could be considered valid: (a) normality, (b) linearity, (c) homoscedasticity, and (d) multicollinearity.
4.4.1 *Assumption 1: Each variable and all linear combinations of the variables are normally distributed.*

Normality of the dependent variable, mental health, was verified above in Figure 4.1. Evidence of normality for family/parenting and exposure to mental health are displayed in Figures 4.2 and 4.3 respectively. The exposure to trauma domain violated the normality assumption and therefore was transformed using the logarithm (Tabachnick & Fidell, 2001). Four participants were excluded, due to mathematical problems. Transforming these four scores was mathematically impossible.

![Figure 4.2 Frequency Chart of Family/Parenting Scores of Respondents (n = 70)](image-url)
4.4.2 Assumption 2: The relationship between variables is linear.

Linearity between variables was determined through visual examination of the data. In this case, bivariate scatterplots were created to identify linear relationships between the predictor variables (i.e., family/parenting and exposure to trauma) and the outcome variable (mental health). Readers should remember that a logarithmic linear transformation was conducted on the exposure to trauma variable and therefore the scaling
on X axis reflects this transformation. The logarithm transformation highlights the clustered nature of the data. Linear transformations do not alter the pattern of relationships, thus, the linearity assumption remained intact. Scatterplots, in Figures 4.4 and 4.5, demonstrated the linear relationships that exist.

Figure 4.4: Scatterplot of Family/Parenting and Mental Health Scores of Respondents (n = 70).
4.4.3 Assumption 3: The residuals (predicted minus observed values) are distributed normally.

In order to test this assumption, a residual plot was created for the mental health scores (See Figure 4.6). The assumption of normality was upheld.
4.4.4 Assumption 4: The predictor variables are not highly redundant with other predictor variables.

Multicollinearity illustrates a condition in which predictor variables are highly correlated ($> .90$). Although intercorrelations among predictors occurs in all research to some extent (Walker, 1999), it is one of the most difficult violations to deal with. As indicated in the correlation matrix (Table 4.3), none of these variables were highly
correlated nor are the predictor variables repeated measures of the same construct; therefore, the assumption of multicollinearity was not violated.

4.5 Data Analysis

SPSS version 14.0 (SPSS Inc., 2005) was used for analysis. The final sample consisted of 70 African American status offenders. Due to the fact that the study participants completed the survey used in this study as part of the intake process, there is no missing data. The power analysis indicated that the study used slightly less participants ($N = 70$) than the number required ($N = 76$) to achieve power of .80. Table 4.3 presents reliability statistics for the exposure to trauma, family/parenting, and mental health domains of the GRAD. Cronbach’s alpha for the exposure to trauma domain was .74. Reliability for the family parenting and mental health domains were .67 and .85 respectively. These inter-item reliability coefficients are comparable to those reported in other studies (Gavazzi, 2006; Gavazzi & Lim, 2003; Gavazzi, Slade, Buettner, Partridge, Yarcheck, & Andrews, 2003).

4.5.1 Correlational Analyses (Research Questions 1-3).

An examination of correlational analysis exhibits some noteworthy relationships in the data. First, exposure to trauma was significantly and positively correlated with mental health ($r = .51, p < .01$). Second, the family/parenting was also significantly and positively correlated to mental health ($r = .62, p < .01$) and finally, exposure to trauma was significantly and positively correlated with family/parenting ($r = .43, p < .01$). As indicated in Table 4.3, statistically significant relationships existed between all three domains. The null hypotheses of no relationships among variables was rejected for
Research Question 1 (i.e., exposure to trauma and mental health), Research Question 2 (mental health and family), and Research Question 3 (exposure to trauma and family).

4.5.2 Multivariate Analyses (Research Questions 4-6)

A between-subjects multivariate analysis of variance (MANOVA) was conducted for three dependent variables: (a) exposure to trauma, (b) family/parenting, and (c) mental health. Gender was the independent variable. Wilks’ Lambda was used as the criterion as suggested by Tabachnick and Fidell (2001).

Results of the MANOVA revealed no significant differences between male and females on exposure to trauma, family/parenting, and mental health. Thus, the combination of exposure to trauma, family/parenting, and mental health risk variables were not significantly impacted by gender $F(3, 62) = 1.32, p = .27$. Although females scored higher than males on all three domains, these differences did not reach statistical significance (See Table 4.7). On the exposure to trauma domain, females scored a mean 5.22 ($SD = 3.75$), and males scored a mean of 4.29 ($SD = 3.47$); however, these differences were not statistically significant. On the family/parenting domain, females scored a mean of 11.82 ($SD = 4.62$) and males scored a mean of 9.90 ($SD = 4.87$). Finally, on the mental health domain, females scored a mean of 16.07 ($SD = 7.82$) and males scored a mean of 12.76 ($SD = 7.34$). Because no significant differences were found between males and females, the researcher failed to reject the null hypotheses that no differences exist between males and females on trauma, family/parenting, and mental health domains. Because there were no significant findings in the multivariate test, there was no need to examine the associated univariate tests.


<table>
<thead>
<tr>
<th>Domain</th>
<th>Females</th>
<th>Males</th>
<th>$F$ (3,66)</th>
<th>Effect Size ($\eta$)</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$(n = 46)$</td>
<td>$(n = 24)$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family/Parenting</td>
<td>11.82 (4.62)</td>
<td>9.90 (4.87)</td>
<td>2.39</td>
<td>.04</td>
<td>.35</td>
</tr>
<tr>
<td>Mental health</td>
<td>16.07 (7.82)</td>
<td>12.76 (7.34)</td>
<td>2.66</td>
<td>.04</td>
<td>.36</td>
</tr>
<tr>
<td>Exposure to trauma</td>
<td>5.22 (3.75)</td>
<td>4.29 (3.47)</td>
<td>1.01</td>
<td>.00</td>
<td>.05</td>
</tr>
</tbody>
</table>

* $p < .01$

Table 4.7: Family/Parenting, Mental health, and Exposure to Trauma Means, Standard Deviations, $F$, Effect Sizes, and Power Estimates.

4.5.3 Univariate Regression Analyses (Research Questions 7-8)

Because of the anticipated gender differences on the variables of interest (exposure to trauma, family/parenting, and mental health), three separate regression models were run: (a) all participants, (b) females only, and (c) males only. The results of the regression analyses predicting mental health for all participants was statistically significant $F (2, 63) = 24.34, p < .001$. The family/parenting variable was statistically significant ($B = .46$, Beta = .76, $p < .00$), as was the exposure to trauma variable ($B = .31$, Beta = 6.88, $p < .00$). This regression model accounted for 44% of the total variance in mental health in all participants. The results for the overall regression model are displayed in Table 4.8.
The regression model for females also produced statistically significant results $F(2.42) = 13.65, p < .00$. The family/parenting variable ($B = .42, \text{Beta} = .71, p < .002$) and exposure to trauma variables ($B = .35, \text{Beta} = 7.43, p < .001$) were statistically significant. This model accounted for 39% of the variance. These results are displayed in Table 4.9.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.76</td>
<td>.17</td>
<td>.46**</td>
</tr>
<tr>
<td>Exposure to Trauma</td>
<td>6.88</td>
<td>2.31</td>
<td>.31**</td>
</tr>
</tbody>
</table>

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

Table 4.8 *Summary of Regression Analysis for Variables Predicting Mental Outcome for All Participants (N = 70)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.71</td>
<td>.22</td>
<td>.42**</td>
</tr>
<tr>
<td>Exposure to Trauma</td>
<td>7.43</td>
<td>2.73</td>
<td>.35**</td>
</tr>
</tbody>
</table>

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

Table 4.9 *Summary of Regression Analysis for Variables Predicting Mental Outcome for Female Participants (N = 45)*
Finally, the regression model for males indicated similar results in that the regression model was statistically significant $F (2, 18) = 8.17, p < .00$. Similar to the female regression model, the family/parenting was statistically significant ($B = .52$, Beta = .79, $p < .04$); however, exposure to trauma was not significant ($B = .25$, Beta = 5.51, $p = .27$). The regression model for males accounted for 50.5% of the variance. The results are displayed in Table 4.10.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Parenting</td>
<td>.79</td>
<td>.33</td>
<td>.52*</td>
</tr>
<tr>
<td>Exposure to Trauma</td>
<td>5.51</td>
<td>4.86</td>
<td>.25</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01

Table 4.10 *Summary of Regression Analysis for Variables Predicting Mental Outcome for Male Participants (N = 21)*

The researcher rejected the null hypothesis that knowledge of exposure to trauma and family/parenting risks do not help predict mental health outcomes for females (Research question 7). The researcher failed to reject the null hypothesis that knowledge of exposure to trauma and family/parenting risks do not help predict mental health outcomes for males (Research Question 8) because the hypothesis was only partially supported. Specifically, the family/parenting domain (but not exposure to trauma) predicted mental health scores for males.
4.5.4 Exploratory Factor Analysis (Research Question 9)

Additional statistical analyses were conducted to explore the possibility of two constructs underlying the trauma domain. Specifically, an exploratory factor analysis (EFA) was conducted to examine whether witnessing trauma and experiencing trauma as a victim are domains contained with the exposure to trauma domain. As an initial step, univariate analysis of the trauma domain was conducted. This inspection resulted in a skewed distribution and a subsequent logarithmic transformation was conducted. The next steps were to test assumptions of the EFA using Bartlett’s test of sphericity and the measure of sampling adequacy (MSA). Bartlett’s test of sphericity was conducted to assess the overall significance of the correlation matrix. Based on the results ($\chi^2 = 195.92$, $df = 66$, $p = .01$), the data met the assumption that the factor matrix is the identity matrix. Therefore, the factors are considered collinear and thus, factorable. These results indicate that factor analysis, though exploratory, is appropriate. MSA is an index comparing the magnitude of the observed correlation coefficient to that of the partial correlation coefficients. Results indicated an MSA of .65, which is considered mediocre according to Hair, Anderson, Tathan, and Black (1998).

For this study, rotation of factor loadings was utilized to improve the interpretability of factors. First, factor loadings greater than .30 were considered to meet the minimal level, loadings of .40 were considered more important, and loadings .50 or greater were considered practically significant (Hair et al., 1998). The factor loadings for the two factors (trauma witness and trauma victim) are displayed in Table 4.11.
<table>
<thead>
<tr>
<th></th>
<th>Trauma Victim</th>
<th>Trauma Witness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma 1</td>
<td>.99</td>
<td>-.11</td>
</tr>
<tr>
<td>Trauma 2</td>
<td>.49</td>
<td>.10</td>
</tr>
<tr>
<td>Trauma 3</td>
<td>.51</td>
<td>.17</td>
</tr>
<tr>
<td>Trauma 4</td>
<td>.41</td>
<td>.31</td>
</tr>
<tr>
<td>Trauma 5</td>
<td>.30</td>
<td>.49</td>
</tr>
<tr>
<td>Trauma 6</td>
<td>.24</td>
<td>.53</td>
</tr>
<tr>
<td>Trauma 7</td>
<td>.23</td>
<td>.74</td>
</tr>
<tr>
<td>Trauma 8</td>
<td>-.06</td>
<td>.29</td>
</tr>
<tr>
<td>Trauma 9</td>
<td>.28</td>
<td>.47</td>
</tr>
<tr>
<td>Trauma 10</td>
<td>.28</td>
<td>.26</td>
</tr>
<tr>
<td>Trauma 11</td>
<td>.02</td>
<td>.21</td>
</tr>
<tr>
<td>Trauma 12</td>
<td>.20</td>
<td>.22</td>
</tr>
</tbody>
</table>

Table 4.11 Factor Matrix for Trauma Witness and Trauma Victim.

Items which loaded more highly onto each factor are indicated in bold.

Second, factor rotation was conducted to facilitate interpretability of factors.

Factor rotation allows for a more simplistic interpretation of the factor pattern by making as many values in each row and/or column as close to zero as possible (Gliem, 2005). The EFA yielded a $\chi^2 = 60.53$, $df = 43$, $p = .04$, which indicated statistical significance.
The Chi-square being statistically significant indicates that the predicted model and observed model different significantly from one another; therefore caution should be used in interpreting the factor loadings. The researcher was unable to reject the null hypothesis that states that traumatic events are not distinguishable in terms of witnessing versus experiencing trauma as measured by the GRAD.

4.6 Summary

African American male and female status offenders were compared on several risk factors, including exposure to trauma, family/parenting, and mental health. Additionally, correlational analyses revealed associations among the three domains. A set of univariate regression analyses were conducted to predict mental health outcomes for participants. The overall regression model was statistically significant, indicating that exposure to trauma and family/parenting account for 44% of the variance in mental health. Mental health accounted for more variance in males than in females. Finally, an exploratory factor analysis was conducted to determine if the underlying structure of the exposure to trauma domain contained two factors: trauma witness and trauma victims. The results do not support such a structure with a goodness of fit index of .04. The following chapter will address the implications of these results.
CHAPTER 5

DISCUSSION

5.1 Purpose of the Study

This study had three main purposes: (a) to determine the impact of exposure to trauma and family/parenting risk factors on mental health outcomes among status offenders, (b) to examine the role of demographics on risk factors and, (c) to further explore the trauma domain be examining its underlying structure. Additionally, this study focused on African American youth. Because this group tends to be overrepresented in the justice system (Bishop & Frazier, 1996), and little is known about the mental health needs of African American offenders (Rawal, Romansky, Jenuwine, & Lyons, 2004), focusing on such a population is critical.

The current study aimed to address the impact of risk factors among status offenders while being mindful of the role of gender on risk factors. There is burgeoning evidence that suggests that females are the fastest growing group of offenders (American Bar Association, 2001) and are more likely than males to be prosecuted for status offenses (Chesney-Lind, 1997). The rapid and continuous rise in female offenders has highlighted a system-wide need to identify the salient risk factors that often accompany them. In a system largely reliant on male theories of offending, it is critical to engage in
empirical work to better understand youth offenders and the differences that may exist among males and females.

Recently, empirical research has demonstrated that male and female status offenders often present to the juvenile justice system with different types of risk factors (Chesney-Lind, 2001, Dembo, Pachecho, Schmeidler, Ramirez-Garmica, Guida, & Rahman, 1998; Funk, 1999; Gavazzi, Yarcheck, & Lim, 2005, Timmons-Mitchell, Brown, Schulz, Webster, Underwood, & Semple, 1997). These research efforts have highlighted trauma as a key risk factor among female offenders. Although these initial efforts are laudable, there has been little focus on how trauma impacts other factors such as mental health among youth involved in the justice system. Additionally, the previous literature has focused on a broadly defined construct of trauma with little attention to differences that may exist between types of trauma, such as witnessing it versus victimization. The following will discuss the results of this research and provide a summary of the key findings. Limitations and suggestions for future research will also be discussed.

5.2 Significant Findings

There were several significant findings in this research. Of particular interest is the impact of exposure to trauma and family/parenting factors on mental health outcomes, and the relationship to the existing research on risk factors among justice-involved youth.
5.2.1 Exposure to Trauma, Family/Parenting, and Mental Health

As predicted, the risk indicators of exposure to trauma, family/parenting, and mental health were significantly and positively associated with one another. It is important to consider that many youth who encounter the justice system do so with a constellation of risk factors, which likely has implications on how to best address these underlying factors (e.g., referrals for individual counseling, group counseling, community based services). Although the current research design did not allow for causal conclusions to be drawn, there is value in knowing that these risk factors are correlated. Knowledge about these relationships can help court personnel assess for other areas that may also be of concern for the youth. Learning about specific risk factors as youth enter programming can provide services that are congruent with the youth’s needs. The fact that exposure to trauma, family/parenting, and mental health risks often occur together can identify types of services that youth would benefit from. The results of the current study indicate that youth who report a history of traumatic experiences also tend to report familial problems and vice versa. Knowing that these risk factors often co-exist is valuable for assessment as well as treatment and is consistent with previous research. Additionally, previous research has indicated that trauma, specifically sexual abuse, often occurs within families (Acoca, 1998). This type of prevalence rate cannot be overlooked in the current study as many repeat status offenders come from dysfunctional families in which abuse by loved ones may have occurred.
5.2.2 Impact of Exposure to Trauma and Family/Parenting on Mental Health Outcomes

Previous research has indicated that many youth who encounter the juvenile justice system have mental health issues (Lexcen & Redding, 2000). As such, juvenile court personnel are often asked to make decisions regarding levels of supervision and types of referrals relevant to justice-involved youth. Having information, such as risk factors, about the youth helps facilitate decision making by court personnel. The current study found that scores on trauma exposure and family/parenting risk factors accounted for 44% of the variance in mental health. Because high numbers of youth in the justice system have mental health problems, the current finding implies a need to also investigate other risk factors such as trauma and familial problems. Furthermore, having specific knowledge regarding trauma and family can provide initial information that can be passed on to mental health clinicians or other service providers such as those conducting diversion programs. Incorporating trauma-specific counseling and familial components to programming can help youth develop skills to manage behaviors related to these concerns. It should also be noted that, although overall gender differences in mental health did not emerge, separate regression analyses by gender indicated that exposure to trauma did help predict mental health outcomes for females but not males. The model was initially evaluated with all participants and indicated that both exposure to trauma and family/parenting predicted mental health outcomes. Surprisingly, the regression model for males accounted for more variance than either the overall model or the model for females only. This finding, though unexpected, provides further evidence for the need to examine the role of gender when assessing risk factors. It may be that males and females respond to trauma exposure differently, with females developing mental health
problems (Berton & Stabb, 1996). A likely explanation for this finding is the small sample size of males. The transformation on the trauma domain resulted in the loss of male participants from an already limited sample size which likely impacted the results. These limitations can be overcome in future studies by utilizing larger samples and using a more realistic effect size that the one in this study.

5.3 Non-Significant Findings

5.3.1 Exposure to Trauma

There was not a statistically significant difference between male and female status offenders on the exposure to trauma domain. This finding is surprising because there is burgeoning evidence in the literature that female youth are particularly vulnerable to trauma (Acoca, 1998; Chesney-Lind, 2001). Others have posited that when exposed to traumatic events, males and females respond differently (Kilpatrick, Saunders, & Smith, 2003). The lack of significant differences between males and females in the current study may reflect this principle. Specifically, it may be that males and females experience similar rates of trauma but the impact on the youth may differ, as evident in the regression analyses. The results indicated that trauma was a significant predictor of mental health outcomes in females but not in males. This may be indicative of the notion that male and female status offenders may respond to trauma differently despite similar levels of exposure. A second possibility is that the power used in this study was not sufficient to detect statistically significant differences. Because several youth in this study reported no exposure to trauma, the distribution of data was abnormal (i.e., positively skewed). Therefore, a linear transformation was conducted and resulted in the loss of 4
participants. This reduction in data, with an already limited sample size, likely impacted the power, making detection of findings more difficult. This explanation may be accurate because in the regression analyses, the exposure to trauma domain was a significant predictor of mental health outcomes when the original trauma score was used, but was no longer a predictor when the transformation occurred and three respondents were eliminated for mathematical reasons. Further, the estimated effect size provided by SPSS indicated a very low effect size, which also impacts power. Examining gender differences on this risk factor in a larger sample may produce significant findings. A third plausible explanation for the lack of statistical significance is the fact that all study participants lived in an urban county, where rates of trauma exposure tend to be high (Berton & Stabb, 1996). Further, this sample is comprised only of repeat status offenders. Many of these youth may have been previously removed from the home due to parental abuse and/or neglect. This may have accounted for a lack of group differences as the current sample is comprised of repeat status offenders who likely have been exposed to a multitude of risk factors, including trauma. Finally, female offenders may not report sexual assault as a traumatic event for several reasons. First, females may not define sexual assault as such in order to feel empowered. Some researchers studying female offenders have found that compared to males, females report high levels of risk on health indicators, including sexual acting out (Gavazzi, Yarcheck, & Lim, 2005) which may be indicative of a history of sexual abuse. Examining this finding more closely, Simkins and Katz (2002) interviewed female offenders with a history of abuse and found that some of the youth explained their high scores on sexual promiscuity reflect reactions to trauma. Specially, some female offenders reported that they “stopped saying no to boys because
they didn’t want to be raped again” (p. 1485). Therefore, reports of trauma may reflect underreporting by female offenders as a way to cope with the trauma. It may be useful to examine health scores in relation to trauma to further examine this possibility.

Other reasons that youth may not report traumatic events include the stigma often affiliated with trauma, shame/embarrassment, fear of disclosing events because the perpetrator is someone the youth knows, or discomfort reporting abuse to a court personnel whom the youth may not trust. Conducting interviews with youth or having trained clinicians administer this assessment may produce different information regarding trauma among status offenders.

5.3.2 Family/Parenting

There was not a significant difference on family/parenting between males and females in this study. This finding is somewhat surprising because previous research has reported such differences (Gavazzi, 2006). Researchers have posited that female status offenders often have familial problems that resulted in their involvement in the justice system (Chesney-Lind, 2001). Specifically, Chesney-Lind posits that many females charged with status offenses are referred for violating parental authority. As such, it was expected that females would report higher levels of family problems than males. There are several possible explanations for this result. One potential explanation for the lack of significant differences between males and females on the family/parenting domain is the reliance on a sample size smaller ($N = 70$) than the recommended number ($N = 78$), to achieve power of .80. The mean scores for females (11.63) were higher than males (9.67), indicating a trend of higher scores for females, but statistical significance was not
reached. It may be that increasing the sample size would result in enough power to detect statistical significance. A second plausible explanation for the lack of significance between males and females is the reliance on a sample of repeat status offenders, who as a whole, display high levels of family risks. As evident in Tables 2 and 3, many of the youth in this sample come from single-parent homes that are economically disadvantaged. It may be that the sample used resulted in high scores for both groups, resulting in non-significant findings when making comparisons. Finally, it is possible that the impact of family factors of males’ mental health have been overlooked in previous studies that focus on other types of outcomes (e.g., types of offenses, education, substance use, etc.).

5.3.3 Mental Health

There was not a significant difference on mental health risk between males and females in this study. The fact that these groups were not significantly different is somewhat surprising because the existing literature suggests that females report higher levels of mental health problems (Funk, 1999; Gavazzi et al., 2005; Ruffolo, Sarri, & Goodkind, 2004). Similar to the above explanations, the small sample size may have been responsible for a lack of significant findings. Females scored higher ($M = 15.83$, $SD = 4.75$) than males ($M = 11.71$, $SD = 7.52$) on the mental health domain, but the difference did not reach statistical significance. Utilizing a larger sample size may result in the expected findings of group differences. On the other hand, some of the previous empirical work that has been done on this topic did not report findings by race (Timmons-Mitchell, Brown, Schulz, Webster, Underwood, & Semple, 1997; Ulzen &
Hamilton, 1998); hence, it is difficult to determine if the results can be generalized to African American youth. Although significant differences were not detected, it is important to recognize that African American youth in this study reported high levels of mental health risk. This information is important for court professionals because there remains an underutilization of mental health services among this group. Recognizing high risk on mental health in status offenders is an important step to linking youth to appropriate services.

5.3.4 Exposure to Trauma Domain: Factor Structure

There is paramount evidence that youth involved in the justice system often report a history of trauma (Lexcen & Redding, 2000; McCabe et al., 2002; Rawal et al., 2004). With such high incidence rates, it is imperative to examine the risk of trauma more closely. This study examined the exposure to trauma domain to determine whether or not it could be conceptualized in terms of two underlying dimensions: witnessing and victimization. The current study utilized exploratory factor analysis (EFA) to detect such dimensions. The results of the Chi-Square goodness of fit index revealed statistically significant differences between the predicted and observed models, which indicated poor fit. Despite this finding, many of the items on the trauma domain did generally load on the variables (i.e., victim and witnessing) in the expected manner, offering some support for a conceptual distinction within the trauma domain. The examination of the assumptions of the EFA (e.g., Bartlett’s test of sphericity and MSA) revealed no violation of these assumptions. This offers additional support for a replication to be conducted using a more general and larger sample. The small and highly specific nature of the
current sample did not lend itself to exploratory analyses and should be further explored using a larger and more general court sample. The literature suggests that the chi-square index is not the best indicator of fit (Hair et al., 1998) and other approaches, such as the root mean square error of approximation (RMSEA) may be more beneficial. Although the goodness of fit in this study was statistically significant, it is important to reexamine this using a larger sample and an improved indicator of fit.

Examining exposure to trauma and trauma victimization separately can provide important information to court personnel and service providers, such as differences in risk factors based on the type of trauma experienced, which can in turn inform programming to address these factors. Furthermore, youth who have reported a history of both exposure to trauma as a witness and as a victim, may present to the justice system with unique needs because of the potential different impact that such experiences can have. With that mind, future researchers should utilize larger samples of status offenders to examine the validity of the trauma domain with regard to witnessing trauma and being a victim of trauma. Following such an examination, researchers should conduct analyses to examine gender differences between those who witness trauma and those who are victims. Such work can further elucidate differences that may exist with regard to pathways that lead to the justice system. It may be that types of trauma are associated with types of offenses committed and/or types of mental health concerns.

5.4 Limitations

Despite the burgeoning body of evidence supporting the use of the GRAD as a reliable and valid measure for use among youth who encounter the juvenile justice
system, limitations in this research are noteworthy. First, the power in the current study is of concern. Due to the small sample size and weak effect size (as estimated by SPSS), the power in this study was likely not adequate to detect gender differences on exposure to trauma, family/parenting, and mental health. Previous research has identified statistically significant differences on exposure to trauma (Gavazzi, 2006; Rhodes & Fischer, 1993), family/parenting (Chesney-Lind, 1997; Widom, 2000), and mental health (Timmons-Mitchell et al., 1997). Second, the current study was conducted among African American youth who were repeat status offenders in a metropolitan county in a Midwestern state, a specific subsample of the offender population. Thus, there is limited external validity as the results may not be applicable to other populations of offenders. Third, the study relied solely on the perspective of the youth, which may not accurately reflect risk factors that may be present. Relying on multiple perspectives can help provide a more complete report of risk and needs of youth. Fourth, there is potential for social desirability to impact the results of the study. The youth in this study may have wanted to present a certain image to the intake staff and may not have answered items honestly. For example, if a youth wanted to appear “tough”, he or she may not have endorsed items that imply a history of victimization because of the stigma often associated with victimization. Similarly, the items on the GRAD are straightforward and it is possible that youth who wanted to appear in a certain manner could respond accordingly. Currently, detection of such response patterns is not available. Fifth, the data in this study was collected by trained. Many youth have difficulty trusting authority figures and may not have been comfortable disclosing personal information, such as history of traumatic events (e.g., abuse). Additionally, the race and/or gender of the court personnel may have influenced
youth’s responses. For instance, female youth may not have felt comfortable reporting incidence of sexual abuse to a male professional. Therefore, there may have been an underreporting of traumatic events by the youth. A sixth limitation is that variability may exist between the professionals who administered the GRAD (Gavazzi, 2006). Though professionals who employ the GRAD are provided a script and undergo training, there is no guarantee that the administration of the test does not vary between those professionals. Due to the sensitive nature of some of the questions administered to the youth, it may be necessary for court personnel to rephrase questions or provide clarification of items, and there is no way to monitor how much variability existed on such explanations between personnel. A seventh limitation of this study is the fact that this instrument focuses solely on risk/need factors of court involved youth. Though this data is valuable, the youth may benefit from additional instruments that assess their strengths in order to identify potential protective factors that can also facilitate treatment efforts. Eight, the instrument used in this study does not assess multiple victimizations. Experiencing multiple traumatic events may impact youth in a different way (i.e., may be at greater risk) than those who experienced one specific trauma. A final limitation of this study is the cross-sectional research design and the restrictions inherent in such a design. For instance, it is not possible to examine any changes that occurred in youth due to programming efforts because data was collected at only one time point, and no control group was utilized.

5.5 Implications for Future Research

Future researchers can overcome several of the hurdles present in the current study. First, steps can be taken to improve the validity. Internal validity can be improved
by increasing the accuracy of information gathered in structured interviews. This can be done in several ways. First, gathering data from multiple sources, such as previous court and mental health records, can help overcome some of the challenges in obtaining accurate information about the occurrence of trauma. Some youth may not feel comfortable disclosing a history of abuse to court personnel and therefore gathering information from multiple sources could be informative. For example, youth may be more likely to report trauma with a counselor or worker with whom they have rapport. Additionally, future research should collect data on the race and gender of the court personnel, as such demographic factors may impact the way in which the youth responds to questions. This information can also be used to further study skills of the court personnel, such as multicultural competencies when working with a diverse population of youth. Second, including a measure of social desirability can help elucidate youth who may over or underreport risk factors. Implementing a measure of social desirability can facilitate the collection of data from multiple perspectives, such as parents or caregivers. If all perspectives of the GRAD are accompanied by measures of social desirability, the process of interpreting reports that do not corroborate (e.g., parents and youth’s perspective) can be facilitated. Finally, qualitative information may also be gathered via focus groups or interviews, which may provide more accurate information on topics such as trauma.

Next, steps can be taken to increase the external validity. This can occur by studying larger samples of status offenders, including first-time status offenders and members of diverse racial and ethnic backgrounds. Although the current study contributed to the literature by focusing exclusively on African American youth, future
studies should aim to include a more diverse group of minority youth in order to detect important cultural differences that likely exist. Replications of the current study with other groups can contribute to the understanding of the broader problem of overrepresentation of minorities in the juvenile justice system (Bishop & Frazier, 1996). Utilizing alternative research designs, such as experimental and/or quasi experimental designs, can overcome some of the threats to validity inherent in the cross-sectional design of the current study. Future studies can extend this study’s value by implementing designs conducive to measuring the efficacy of diversion programming. There has been a recent surge in literature recognizing the need for gender-specific programs (Belknap, Dunn, & Holsinger, 1997) and the next step is to empirically examine the efficacy of such programs. Such efforts will benefit youth and providers alike by identifying what strategies or programs are effective and for whom.

The current study contributes to the existing literature on status offenders and the specific risk factors that tend to be elevated among this group (e.g., exposure to trauma, family/parenting, and mental health), and future steps to enhance this knowledge are suggested. One step is to build on the resiliency literature by investigating how protective factors among court involved youth impact those with a history of trauma. Such data could also inform prevention and intervention efforts alike, and may facilitate a shift to a more positive approach to working with troubled youth. Examining the presence of both risk factors and protective factors among status offenders will likely provide a more complete description of the problems and strengths of the youth. This more balanced approach is also more congruent with the framework of the juvenile justice system where specialized dockets often incorporate a system of incentives and sanctions. A second step
is to extend the current study’s efforts by including the two underlying factors of trauma (i.e., witnessing trauma and experiencing trauma as a victim) in analyses. Assessing information on these two domains, among a large sample, can elucidate the understanding of trauma and its impact on youthful offenders, and further the work on differential pathways to the justice system. Examining witnessing and victimization of trauma can also impact treatment programming with efforts more specific to the needs of the youth. Finally, concurrent validity studies can be conducted using the two trauma domains and well established measures of trauma such as the Trauma Symptom Checklist for Children (Briere, 1996).

In addition to the research implications, the current study can inform clinical work. For instance, sharing risk factors, such as those examined in the current study, can facilitate treatment planning for clinicians (e.g., individual, group, and family counselors). Assessment information, such as that presented in this study, lends itself to collaborative efforts between juvenile justice professionals and mental health professionals. Youth who encounter the justice system often present with a multitude of risk factors, and as such, can likely benefit from a synergetic effort by professionals to provide the appropriate services. Clinicians and justice professionals can use data on risk factors to help build intentional services for youth and their families. Identification of risk factors, and the exchange of this information are likely to provide a more lucid explanation of how youth encounter the justice system in the first place, which has implications for primary prevention as well.
5.6 Conclusion

The current investigation is additive to the literature because it focuses on status offenders, a large and at-risk population. Furthermore, this study examines the prevalence rates of exposure to traumatic events, existing mental health issues, and family problems. Knowledge of these three risk factors can link the needs of youth who have been exposed to trauma with relevant programming to help youth receive treatment for underlying mental health issues which may have otherwise been overlooked. Additionally, the current effort examines the role of gender and focuses exclusively on African Americans, a population that is often overrepresented in the offender population but understudied in the research literature. Focusing on these attributes represents an attempt to contribute to the literature as the impact of gender and ethnicity are often overlooked in empirical studies of status offenders, despite knowledge of differential needs of male and female offenders and the chronic overrepresentation of minority youth in the justice system. Examining the risk factors of youth and focusing on contextual factors, such as gender and ethnicity, may provide relevant information on how to better address these needs (e.g., family/parenting, trauma, and mental health) among the offender population. This study provides information on why it is important to understand the impact of trauma, family problems, and the occurrence of mental health issues among status offenders. Future efforts can help overcome the limitations of the current study (e.g., small sample size, cross-sectional design, limited external validity, etc.) and contribute to the evolving literature on justice-involved youth. As evident in this document, the justice and mental health fields overlap, creating a unique opportunity to facilitate rehabilitative care of status offenders. Such efforts will contribute the most by emphasizing the unique needs
of male and female offenders, and taking into consideration the contextual factors that impact the youth.
APPENDIX A

YOUTH SCRIPT
“As part of your standard procedure here at (name of agency or organization), regarding the work that we do with youth and their families, we are going to ask you a number of questions that we will be recording through the use of a computer. The questions focus on lots of different kinds of issues and challenges that young people sometimes fact. They may or may not apply to you.

I am going to read the questions off the computer screen, and then ask you to respond. You will respond by telling me “no/never” if those issues are not present in your life. “yes, a couple of times”, if those challenges are somewhat present in your life, or “yes, a lot” if those challenges have been a big part of your life.

Most of the time I am going to ask you to think back over the last six months. For one set of questions I am going to ask you to think back over the last year. For one other set of questions I will ask you to think back over your whole life as far back as you can remember. When we are done with all of the questions, the computer will add up all of your answers and provide us with a picture of the challenges you have been facing. This picture will help us determine what type of services might be of help to you and/or your family.
APPENDIX B

EXPOSURE TO TRAUMA DOMAIN

SUBSCALE OF GLOBAL RISK ASSESSMENT DEVICE (GRAD)
Global Risk Assessment Device (Subscales)

Youth Version

Exposure to Trauma (12)

1. Have you ever been a victim of physical abuse?
2. Have you ever been a victim of sexual abuse?
3. Have you ever been neglected by someone who was supposed to care for you (left alone, not had your needs for food, shelter, or clothing taken care of, etc.)?
4. Have you ever been involved in a violent dating relationship?
5. Have you ever witnessed domestic violence in the home?
6. Have you ever seen someone you know get really sick and/or hurt?
7. Have you ever witnessed a violent act against another person (shooting, stabbing, beating)?
8. Have you ever seen someone die?
9. Have you ever been threatened by another person with physical harm?
10. Have you ever been a victim of a crime?
11. Have you ever been hospitalized for a significant injury or illness?
12. Do you ever feel numb when you think about things that have happened to you?
APPENDIX C

FAMILY/PARENTING DOMAIN

SUBSCALE OF GLOBAL RISK ASSESSMENT DEVICE (GRAD)
Global Risk Assessment Device (Subscales)

Youth Version

Family/Parenting (17)

1. How often do you get into fights with adults who live in your home?
2. How much of the time do the adults who live with you NOT know where you are?
3. Are family members ever too critical of you?
4. Do you ever feel that you are not welcome to stay in your home?
5. Are you ever at-risk of harm, or are you ever in physical danger when you are in your home?
6. When you are punished for your behavior, is it harsh (the punishment is worse than the behavior) or inconsistent (the punishment is never the same twice for the same behavior)?
7. How often have you been involved in a physical fight (shoving, hitting, punching etc.) with an adult family member as a result of something you did wrong?
8. How often are adults who live in your home verbally abusive to you (swearing, calling you names etc.)?
9. Do you ever become more uncontrollable after you have been punished?
10. Do your family members ever seem to go out of their way to NOT upset you?
11. Does it ever seem like your family members tip-toe around you (so they don't upset you)?
12. How often do you fight with your brothers and sisters?
13. Does it seem like the adults in your home do things themselves instead of asking you to do them?
14. Does your relationship with your mother ever feel not so good?
15. Does your relationship with your father ever feel not so good?
16. Does your family have a hard time paying bills and buying food?
17. Has your family been contacted by a social service agency because of something happening in your home?
APPENDIX D

MENTAL HEALTH DOMAIN

SUBSCALE OF GLOBAL RISK ASSESSMENT DEVICE (GRAD)
Global Risk Assessment Device (Subscales)

Youth Version

Mental Health (26)

1. Do you ever have difficulty controlling your anger?
2. Do you ever exaggerate how good you are at doing something?
3. Do you ever have trouble paying attention or concentrating?
4. Are you ever high strung or tense?
5. Are you ever nervous or do you ever get startled easily?
6. Do you ever have a hard time sitting still?
7. Do you ever try to get attention from someone any way you can?
8. Do you ever try to get even with people when they do something to you?
9. Do you ever destroy things that belong to you when you get angry?
10. Do you ever yell, shout or curse too much?
11. Have you ever threatened to harm people?
12. Have you ever been physically aggressive towards others?
13. Do you ever get into a motor vehicle with others who drive under the influence of drugs and/or alcohol?
14. Do you ever do things to hurt your body, like cutting yourself?
15. Do you ever do things that are dangerous, like jumping from high places, moving cars etc.?
16. Do you ever have bad dreams or nightmares?
17. Do you ever have difficulty sleeping?
18. Have you ever lost interest in things you used to enjoy?
19. Do you ever feel sad, moody, blue or depressed?
20. Do you ever feel like you can’t trust anyone?
21. Have you ever experienced a major change in appetite (either increase or decrease)?
22. Do you ever have panic attacks?
23. Do you ever have difficulty breathing, pain in your chest, or it feels like your heart is pounding too much?
24. Have you ever felt like you were physically numb to pain?
25. Do you ever feel like you think about or talk about sex too much?
26. Do you ever feel like you don’t belong anywhere because of the color of your skin or the family you come from?
APPENDIX E

EXEMPTION FROM INTERNAL REVIEW BOARD (IRB)
Dear Investigators,

Based on your response I have determined this project does not involve human subjects. You do not need approval from the IRB or through exemption to do this work. This will be your only notification. If a publisher requests an IRB approval you can use this e-mail as proof of a “Not Human Subject” determination.

This decision is based on the August 10, 2004 OHRP guidance; OHRP does not consider research involving only coded private information or specimens to involve human subjects as defined under 45 CFR 46.102(f) if the following conditions are both met:

(1) the private information or specimens were not collected specifically for the currently proposed research project through an interaction or intervention with living individuals; and

(2) the investigator(s) cannot readily ascertain the identity of the individual(s) to whom the coded private information or specimens pertain because, for example:

   (a) The key to decipher the code is destroyed before the research begins;

Janet
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