IS ADOLESCENT FEMALE SEX OFFENDING A TRUE PARADOX?
A COMPARATIVE STUDY OF GENDER DIFFERENCES
IN SEX OFFENDING AND DELINQUENCY

By

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To my parents
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DEFINITION OF TERMS

Definitions are based on those established by the Center for Sex Offender Management (1999) and Black’s Law Dictionary (Black & Garner, 1999).

Adolescent sex offender  An individual aged 13-17 who commits illegal sexual behavior as defined by the juvenile sex crime statutes in his/her jurisdiction. For this study’s purposes, only hands-on first, second, and third-degree felony sex offenses will be included.¹

Adjudication The process for determining an adolescent’s involvement in an offense.

Antisocial behavior Actions that a juvenile commits which violate the rights of others. Bartol (2006) notes that this term sometimes includes suicide and substance abuse; however, throughout this document, it will only be used to indicate individuals who specifically violate others.

Delinquent act Any act committed by a juvenile that would be a criminal violation of a federal or state law if committed by an adult.

Juvenile delinquent A legal classification referring to an adolescent who has been adjudicated delinquent in court. To distinguish from adolescent sex offenders, adolescents who commit non-sex-based offenses will be referred to as “juvenile delinquents” throughout this document.

Offend (v.) To physically or sexually abuse another person.

Recidivism An officially detected recurrence of illegal behavior after a previous adjudication.

Status offense An act committed by a juvenile that violates the law, only considered an offense when committed by an individual under the age of 18 (i.e., truancy).

Victimize (v.) To have been physically or sexually harmed by another person.

¹ Refer to Appendix A for definition of offenses. For a full definition, see Florida Statute Chapter 985.
IS ADOLESCENT FEMALE SEX OFFENDING A TRUE PARADOX? A COMPARATIVE STUDY OF GENDER DIFFERENCES IN SEX OFFENDING AND DELINQUENCY

By

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This study aimed to help determine whether adolescent female sex offenders constitute a unique group in terms of exposure to psychosocial risk factors that literature suggests influence the development of sexual offending behavior. Using archival data from youth referred to the juvenile justice system for violent “hands-on” felonies, a group of adolescent female sex offenders \((N = 145)\) was compared with equal-sized groups of adolescent female delinquents, adolescent male sex offenders, and adolescent male delinquents. As expected, significantly more sex offending girls than boys had experienced sexual abuse and depression/anxiety and had been diagnosed with a mental disorder. Additionally, when compared with delinquent girls, sex offending girls had experienced more sexual abuse and trauma; however, there were no differences between these groups of girls in terms of depression/anxiety and suicidality. Finally, although a substantial proportion of both sex offending and delinquent girls had experienced poly-victimization, nearly one third had not experienced any trauma or victimization. The findings of this study suggest that further empirical research is
needed to better understand the ways in which sex offending girls resemble other delinquent youth.
CHAPTER 1
INTRODUCTION

Females in the Juvenile Justice System

Women and girls have historically been neglected in studies of crime (Akers & Sellers, 2004; Belknap & Holsinger, 1998; Chesney-Lind & Shelden, 1998). Belknap and Holsinger (1998) note that historically, the relatively small proportion of females in the juvenile justice system has been used to justify the lack of diverse educational, vocational, and treatment programs for girls. However, Miller and Trapani (1995) aptly state that even if “females constitute only a small portion of the total delinquent population, minority status has never justified ignorance of a minority’s needs” (p. 431). The 1992 reauthorization of the Juvenile Justice and Delinquency Prevention Act called for research that would improve the processing and treatment of adolescent female offenders; however, this goal is still in progress (Foley, 2008).

Adolescent females have recently received more attention because of the perception that they are committing more crimes. For example, violence among adolescent girls is the only area consistently showing an increase in reported rates of violent offending in Canada (Leschied, Cummings, Van Brunschot, Cunningham, & Saunders, 2000). In the U. S. the general crime rate for adolescent girls has grown at a higher rate than for any other segment of the population (Leschied et al., 2000): for example, from 1991-2000, the juvenile arrest rate for aggravated assault increased by 44% for girls, whereas it declined 16% for boys (Snyder, 2002).

A recent report by the United States Department of Justice has challenged the notion that adolescent girls are actually committing more crimes. In an extensive series of analyses, Zahn et al. (2008) reviewed trends in violent crimes and assaults
committed by juveniles between 1980 and 2005. They compared official arrest data (from Uniform Crime Reports and the Federal Bureau of Investigation) with self-report (from Monitoring the Future) and victim data (from the National Crime Victimization Survey) and concluded that although the numbers of arrests of juvenile girls have indeed increased, the proportion of female offenders to male offenders has remained fairly consistent (around 30%). Similar ratios have been reported by others as well (Cauffman, 2008; Foley, 2008; Snyder & McCurley, 2008). Some authors have concluded that increases in the number of arrests may reflect changes in policy rather than girls committing more offenses (see Steffensmeier, Zhong, Ackerman, Schwartz, & Agha, 2006). For example, “zero-tolerance” crime policies require schools to refer adolescents to the juvenile justice system for excessive truancy and other related problems; 16% of adolescent referrals in Florida in 2006-2007 were school-related (Florida Department of Juvenile Justice, 2007). Societal responses to female offending may have changed as well, such as a heightened awareness of the problem and a greater willingness to hold girls accountable for their behavior, resulting in more reported crimes and arrests (Chesney-Lind & Shelden, 1998; Foley, 2008; Kubik, Hecker, & Righthand, 2002).

Despite controversy over current prevalence statistics, and the fact that most girls' violence is of a less serious nature than boys' (Moffitt, Caspi, Rutter, & Silva, 2001; Zahn et al., 2008), justice systems are now managing a growing number of girls. Although the majority of these arrests are for non-violent offenses, such as shoplifting and status offenses, violent crimes such as assault constitute approximately one fifth of these arrests (Sharp & Simon, 2004; Snyder & McCurley, 2008). Zahn et al. (2008)
found that boys’ violence more likely occurs away from home, whereas girls’ violence more often occurs at home; in these cases, the offender and/or victim are often removed from the home and placed in foster care or residential treatment, creating family disruption (Center for Sex Offender Management, 1999).

In addition to the negative effects of female offending on victims and the toll it takes on the justice system, research suggests its long-term consequences are also devastating for the offenders themselves. In a review on the adult outcomes of delinquent girls based on longitudinal data, Pajer (1998) found higher mortality rates, psychopathology, and dysfunctional relationships among women with a history of antisocial behavior than those without a history of delinquency. Additionally, chronic problem behavior during childhood and adolescence has been linked with substance abuse, depression, and other emotional problems in adulthood (Fergusson, Horwood, & Ridder, 2005; Hawkins, Catalano, & Miller, 1992; Moffitt et al., 2001). Findings such as these have led some authors to conclude that the long-term prognosis for female offenders is poorer than it is for male offenders (see Cauffman, 2008).

Considering existing policies are largely based on models of male offending (Foley, 2008), many researchers and policymakers argue that comprehensive research studies are needed to determine whether adolescent female offenders constitute a unique group in terms of recidivism risk, legal disposition, and treatment needs (Bumby & Bumby, 1997; Chesney-Lind & Shelden, 1998; Foley, 2008; Righthand & Welch, 2001; Schmidt & Pierce, 2004). Additionally, some states are moving toward evidence-based practice for economic and accountability reasons (Center for Sex Offender Management, 1999).
Management, 1999). The lack of existing research on adolescent females means that many areas lack specific policies for girls (Foley, 2008; Sharp & Simon, 2004).

Additionally, research suggests girls and boys may differ in their treatment within the U. S. judicial system. Some researchers have found girls receive harsher sentences because the paternalistic nature of the courts views girls' antisocial behavior as more “deviant” than boys (Belknap & Holsinger, 2006; Belknap, Holsinger, & Dunn, 1997), whereas others have found no difference (Steffensmeier, Kramer, & Streifel, 1993). Family dynamics may contribute to gender differences in juvenile arrests: parents may have different expectations about their sons’ and daughters’ obedience to authority (Chesney-Lind, 1988) and these expectations may also affect how the justice system responds to a girl’s behavior when she “acts out” (Krause & McShane, 1994).

In some samples of incarcerated adolescents (i.e., Belknap & Holsinger, 2006; Vandiver, 2006) girls are significantly younger than boys, indicating either that girls are offending at earlier ages or are institutionalized sooner than boys. Furthermore, both female and male incarcerated sex offender populations may be younger than incarcerated delinquent populations, because often sex offenders are more severely punished for their first offense than youth committing other types of crimes; typically, the harshest sentences are given to adolescents who have abused children in a violent manner (Zimring, 2004).

There is a strong need for more empirical research to inform the justice system. Many delinquency programs were not founded upon theoretical or empirical research: Akers and Sellers (2004) note that “in most public discourse about criminal justice policy, the underlying theoretical notions are ill-stated and vaguely understood” (p. 11).
When theories are present, they are usually based on male pathways to crime (Foley, 2008). Belknap and Holsinger (2006) note that mainstream criminology still tends to ignore how events that may increase the risk for offending may be gendered. This neglect applies to boys’ gender issues (i.e., masculinity) as well as gender issues for girls. Similarly, Sharp and Simon (2004) recommend that youth-serving systems collaborate to create gender-competent programs for girls involved in the justice system given their offending behavior is often a reaction to serious problems.

**Adolescent Sex Offending**

For the most part, adolescent sex offending was not considered a public safety concern until the 1960s-1970s (Barbaree & Marshall, 2006; Becker, 1988; Davis & Leitenberg, 1987). Several explanations for this include: 1) beliefs that incidence figures for adolescent crimes are low; 2) beliefs that crimes committed by adolescents are less serious than those committed by adults; and 3) beliefs that adolescent sexually aggressive behavior is “exploratory” in nature (Becker, 1988). However in the 1980s researchers and policymakers began to question these beliefs. Data from a variety of sources suggest that adolescents commit a large number of sex offenses. According to the U. S. Department of Justice’s Uniform Crime Reports (1999), juveniles comprise approximately 17% of all arrests for sex crimes and one third of all sex offenses against children. National Incident-Based Reporting System data indicate that in 2004, 24% of all sexual assaults reported to law enforcement involved a juvenile as the main perpetrator (Snyder & McCurley, 2008). Unofficial reports, such as victim surveys, suggest that 30% - 50% of all child abuse cases can be attributed to adolescent offenders (Davis & Leitenberg, 1987).
Additionally, the effects of victimization by juveniles have been found to be potentially as devastating as victimization committed by adults. In one sample of adult sex offenders, Groth (1977) found that the offenses they committed as adults were essentially as severe as those they had committed as juveniles. Finally, research is mixed regarding the notion of sexual experimentation: a study by Groth (1977) found that only 9 of 63 (14%) adolescent offenders had sexual assault as their first interpersonal sexual experience (see also Barbaree & Marshall, 2006; Becker, 1988; Center for Sex Offender Management, 1999; Center for Sex Offender Management, 2007). Thus, adolescent sex offending may be more complex than previously believed.

**Adolescent Female Sex Offenders**

Adolescent female sex offenders have been even more neglected by research than female juvenile delinquents and male sex offenders; literature on this population is only now “slowly emerging” (Vandiver & Teske, 2006). Although the majority of sex crimes are committed by males, females account for approximately 7% of juvenile arrests for sex offenses (Snyder, 2002). Victims’ studies have revealed that females commit a larger proportion of sex offenses than was previously believed: in one study, approximately 20% of males and 5% of females had been victimized by females (Finkelhor, 1984). Some self-report studies have found even higher rates (e.g., Fritz, Stoll, & Wagner, 1981; Johnson & Schrier, 1987). Allen (1990) suggests that the relatively low incidence rates of sexual offending by females should not obscure the absolute numbers of occurrences: Using U. S. Census data based on prevalence rates at that time, he estimated that approximately 1.6 million males and 1.5 million females had been sexually abused by females.
As with other sex crimes, offenses committed by females are greatly under-reported. Many other types of offenses are also underreported, including drug offenses, property crimes, and domestic violence (Miethe, Olson, & Mitchell, 2006; Zimring, 2004), but the nature of the crimes girls commit may exacerbate the problem. The most common sex offenses committed by adolescent girls are non-aggressive acts, such as mutual fondling, that occur in a caregiving context such as babysitting (Fehrenbach & Monastersky, 1988; Fromuth & Conn, 1997; Vandiver & Teske, 2006). Adolescent girls appear to be slightly more likely than boys to abuse acquaintances or relatives, and studies show that familiar victimization is reported to authorities less often than stranger victimization (Bumby & Bumby, 1997; Hunter, Lexier, Goodwin, Browne, & Dennis, 1993; Vandiver & Teske, 2006). Parents and law enforcement officials alike may fail to recognize these crimes when they occur (Bumby & Bumby, 1997; Fehrenbach & Monastersky, 1988); traditional law enforcement training has focused on males as perpetrators and females as victims, suggesting that when reports are made involving female offenders, they may be processed differently than cases fitting “typical” profiles (Allen, 1990; Center for Sex Offender Management, 2007; Denov, 2004). Sex offenses against children committed by adolescents probably result in even fewer arrests than do those committed by adults, presumably because adult child molesters are viewed as more dangerous by the criminal justice system and/or because juvenile offenders are usually known to the victim, so families may be less willing to report the crime (Davis & Leitenberg, 1987; Groth, 1977).

Female offending may also be underreported because it goes against traditional gender stereotypes which hold that girls do not commit sex offenses (Frei, 2008).
Additionally, sexual perpetration by females is often viewed as less serious than perpetration by males (Mathews, Hunter, & Vuz, 1997; Schmidt & Pierce, 2004; Smith, Fromuth, & Morris, 1997) and as having less severe consequences (Mathews et al., 1997; Schmidt & Pierce, 2004). Media portrayal of female offenders often focuses on “emotionally fragile” teacher-lover situations, which represent a small proportion of actual female sex offender cases (Frei, 2008, p. 495); in fact, most females who are incarcerated for sex offending have committed offenses against children (Kaplan & Green, 1995). Some authors argue that a shift in the general perception of female criminality is necessary to determine whether the lower reported numbers of female perpetrators of sex offenses are accurate or whether they are a result of preconceived notions of gender roles and aggressive behaviors (Frei, 2008).

In part due to societal stereotypes, very little research has been conducted specifically examining adolescent female sex offenders. Even acknowledging the existence of female sex offenders continues to be a controversial issue (Higgs, Canavan, & Meyer, 1992; Schwartz & Cellini, 1995). This problem has been compounded by the fact that the base-rate for female offending is low, making it difficult to conduct well-designed research. Most published studies have used single case designs (e.g., Fehrenbach & Monastersky, 1988) or small clinical samples (e.g., Hunter et al., 1993; Vandiver & Teske, 2006).

Nonetheless, these studies have revealed some provocative results, most notably by researchers who have concluded that adolescent female sex offenders differ significantly from adolescent male sex offenders. For example, in some samples, female offenders reported having experienced higher levels of sexual victimization
(Kaplan & Green, 1995; Matthews, Matthews, & Speltz, 1991; Travin, Cullen, & Protter, 1990) which occurred at younger ages and was committed by more perpetrators (Schmidt & Pierce, 2004). Many girls also reported experiences of physical abuse although it remains unclear as to whether these rates are higher than for adolescent sex offenders as a whole (Miller & Trapani, 1995). Girls have also been found to abuse younger victims and victims of both genders (Hunter et al., 1993; Fehrenbach & Monastersky, 1988) and begin offending at a younger age than boys (Bumby & Bumby, 1997; Miccio-Fonseca, 2000; Schwartz, Cavanaugh, Pimental, & Prentky, 2006; Vandiver & Teske, 2006).

However, several of these researchers concluded that adolescent female sex offenders constitute a unique group without comparing them with other groups. Some studies which did conduct group comparisons found few differences on certain variables of interest. For example, Bumby and Bumby (1995) found no significant differences between male and female sex offenders on depression, anxiety, and suicidal behaviors. These complex findings, coupled with the small amount of extant research on this topic, have led many experts in this field to recommend that more research be conducted to determine whether young female sex offenders constitute a unique group in terms of recidivism rates, risk assessment, and treatment needs (Bumby & Bumby, 1997; Fehrenbach & Monastersky, 1988; Hunter et al., 1993; Matthews et al., 1997).

My study hopes to address this question by testing whether adolescent female sex offenders have indeed been exposed to higher levels of certain risk factors, as some authors suggest. The primary goal of this study is to determine whether adolescent female sex offenders constitute a unique group by comparing them with matched
groups of male adolescent sex offenders and female juvenile delinquents. Based on the current literature, I hypothesize that adolescent female sex offenders will have committed their first offense at a younger age than the other groups. When compared with sex offending boys, I hypothesize sex offending girls will report more substantial trauma history, including witnessing violence and experiencing sexual abuse. I also expect girls to be more likely to have been diagnosed with a mental disorder (such as PTSD). However, I expect no significant group differences in terms of a history of suicidality and symptoms of internalizing problems (depression/anxiety). When compared with delinquent girls, I expect sex offending girls to report a more extensive history of sexual abuse and trauma. I also expect them to be more likely to experience depression, anxiety, and suicidality, and to have been diagnosed with a mental disorder. Finally, I will test whether the probability of membership in the sex offender group is different for boys and girls as a function of age at first offense and a history of sexual victimization, and whether there is a significant interaction effect among these variables.

In addition to these primary hypotheses, I will test secondary hypotheses to explore whether significant gender differences exist between sex offending and non-sex offending youth in exposure to these risk factors. To do so, I will compare the groups of male and female sex offenders to matched groups of male and female juvenile delinquents. I expect both sex-offending and non-sex-offending girls to report higher levels of mental health problems including depression and anxiety, more extensive sexual victimization and trauma history, and to be more likely to have received a mental disorder diagnosis, than boys. However, I do not expect significant gender differences in reported experiences of physical abuse, neglect, and substance use.
The chapter that follows critically reviews contemporary literature regarding adolescent female sex offending as well as the related issues of adolescent male sex offending, adult female sex offending, and female juvenile delinquency.
CHAPTER 2
REVIEW OF THE LITERATURE

Adolescent females who sexually perpetrate have been afforded the least attention in the sex offending literature (Barbaree & Marshall, 2006; Green, 1999; Vandiver & Teske, 2006). This chapter begins by reviewing the descriptive studies that have been conducted with this population and the extent to which they have led to the development of theory to describe adolescent female sex offending behavior. I then review the more rigorous empirical studies that have subsequently been conducted to test these theories. Next, because the literature on this population is fairly limited and because this study compares adolescent female sex offenders with other groups, I review the more extensive knowledge base on three related populations: adolescent male sex offenders, adult female sex offenders, and adolescent females who commit non-sex offenses. I discuss some of the dominant psychosocial theories developed to describe offending behavior among these populations and the extent to which this literature informs our knowledge of adolescent female sex offending. Finally, I present this study’s design, implications, and specific hypotheses.

Adolescent Female Sex Offenders

Background

Adolescent female sex offenders have been underrepresented in the sex offender literature (Bumby & Bumby, 1997; Mathews et al., 1997). The first studies seeking to explicitly understand adolescent female sex offending emerged in the late 1990s and consisted mostly of descriptive studies using small samples, which is unsurprising given the low base rates of female offending and the inherent difficulty in recruiting research participants. Among the first was a study by Fehrenbach and Monastersky (1988) who
interviewed female adolescent sexual offenders in an outpatient clinic and found that these girls reported committing offenses, without coercion from male co-offenders, starting at an early age. Many reported histories of physical and sexual victimization as well as early childhood maltreatment and neglect.

Since then, additional descriptive studies have contributed to a fuller understanding of this population, and many researchers and clinicians have in turn concluded that adolescent female sex offenders are distinct from boys in terms of exposure to risk factors, offending behavior, and treatment needs. The majority of these girls’ victims are children under six years old and a significant proportion of their offenses occur during child care activities (Bumby & Bumby, 1997; Fehrenbach & Monastersky, 1988; Hunter et al., 1993; Hunter, Becker, & Lexier, 2006; Vandiver & Teske, 2006). Most victims are either related to or acquainted with the offender (Bumby & Bumby, 1997; Vandiver & Teske, 2006): Sexual abuse of unknown children typically occurs in less than 10% of cases (Mathews et al., 1997). Unlike adolescent male offenders, adolescent females appear to be equally likely to victimize males and females (Bumby & Bumby, 1997; Hunter et al., 1993). Many adolescent female sex offenders have a previous history of mental health treatment (Bumby & Bumby, 1997; Hunter et al., 1993; Lewis & Stanley, 2000).

These studies have helped to describe the characteristics of this population, yet many suffer from limitations. For example, sample sizes range from single case studies (e.g., Higgs et al., 1992) to small groups ($N < 20$) of residentially-placed youth (e.g., Bumby & Bumby, 1995; Hunter et al., 1993). Additionally, few of these authors use statistical methods to support their conclusions, and many of the studies which conclude
that female sex offenders have high levels of psychopathology are based on clinical samples. Vandiver and Kercher (2004) note that reliance on clinical samples gives the impression that female sex offenders suffer from serious psychological problems because the individuals in those groups were usually primarily referred for mental health problems, and they recommend the use of diverse samples when testing such hypotheses to improve their generalizability.

Another caution against overgeneralizing these studies’ findings is that adolescent female sex offenders are a heterogeneous group (Schmidt & Pierce, 2004). These girls’ behaviors range from fondling to oral sex to vaginal and anal intercourse (Bumby & Bumby, 1997; Fehrenbach & Monastersky, 1988; Hunter et al., 2006; Vandiver & Teske, 2006). For some girls, these offenses represent limited exploratory behaviors, whereas for others, they are repeated aggressive acts (Schmidt & Pierce, 2004). This population exhibits greater variability in sexual arousal and behavior patterns than adult sex offenders and most do not meet the accepted criteria for pedophilia (i.e., recurrent sexual fantasies/behaviors involving children; Mathews et al., 1997).

Despite the shortcomings of extant descriptive studies as well as the questionable generalizability of their findings, they have been useful in establishing adolescent female sex offending as a problem of concern which merits further research. Additionally, although this group may be heterogeneous, these studies suggest sex offenders share important overarching characteristics, such as coming from chaotic households where substance abuse, domestic violence, and sexual and physical maltreatment occur (Bumby & Bumby, 1997; Hunter et al., 1993; Hunter et al., 2006). Given that these girls often present with academic, psychological, and behavioral
difficulties, a better understanding of risk factors for offending could aid in the advancement of developmental theory to explain the etiology of their problems.

**Theory**

Because the study of adolescent female sex offending has only recently begun, theory to explain its etiology is in its infancy (Bumby & Bumby, 1997). Because sexual victimization has consistently been found to be a risk factor for adolescent female sex offending, it has been incorporated into several developing theories of how victims become offenders. Green (1999) proposes that because relatively few females who have been victimized go on to abuse others, exposure to additional risk factors, such as psychopathology, substance abuse, and cognitive and/or social deficits is likely necessary to transform victims into offenders. He suggests that this process might be mediated by environmental reinforcers such as sexual arousal and/or dependence on co-offenders. Hunter et al. (2006) suggest that girls who have been abused may go on to abuse younger children as a way of mastering their own victimization. The development of psychological and behavioral problems after sexual victimization is likely due to both the magnitude of the abuse as well as its occurrence in the absence of significant social supports and protective factors (Hunter & Figueredo, 2000; Hunter et al., 2006).

Attachment theory (Bowlby, 1969, 1988) has also been used to explain the etiology of adolescent female sex offending. Bowlby (1969, 1988) proposed that the patterns of early interactions between a child and his/her caregiver are internalized in the form of “internal working models” which then regulate attachment-related thoughts, feelings, and behavior in close relationships throughout the lifespan. When children develop negative representations of self and others or adopt defensive regulatory
strategies, they may be prone to developing psychological problems later in life (Bowlby, 1969, 1988). Although little research has specifically tested attachment theory with girls who have sexually perpetrated, longitudinal studies have found that seductive behavior and role reversal in the parent–child relationship predict inappropriate gender boundaries, lower ratings of social competence, fewer observed peer contacts, and lower peer-rated popularity (Sroufe, Bennett, Englund & Urban, 1993). Similarly, Hunter et al. (2006) hypothesized that girls who are socially isolated befriend and subsequently sexualize relationships with younger children. Attachment may also be impacted by caregiver instability: for example, the large sample of sex offending girls studied by Schwartz et al. (2006) had experienced an average of 11 different living situations. Openshaw and Nelson (2004) propose that because sex offending girls are often raised in chaotic, abusive, and/or neglectful environments, they have difficulty forming emotionally close relationships. Finally, attachment bonds may be influenced by sexual victimization: childhood abuse occurs during critical developmental time period when beliefs about self, others and relationships are first being learned (Briere & Elliott, 1993). Exactly how early attachment problems manifest into sexually offending behavior is a complex process that is subject to individual differences.

Considering that a history of victimization is common among adolescent female sex offenders, many likely suffer from Post-Traumatic Stress Disorder (PTSD; American Psychiatric Association, 1994, 2000). Some authors argue that the rates of PTSD among female offenders are sufficiently high that it should be included in evaluation and treatment models (Green, 1999; Hunter et al., 2006). At this point treatment programs specifically for adolescent female offenders are still in the process of being developed;
currently, sex offender “treatment as usual” is based on knowledge about male offenders and does not primarily focus on trauma-related symptoms (Center for Sex Offender Management, 2007; Schmidt & Pierce, 2004).

The Information Processing of Trauma Model (IPTM; Hartman & Burgess, 1988) is an integrative framework which takes into account a variety of factors before, during, and after childhood sexual abuse (which these theorists operationalize as a form of trauma). They argue that if the traumatic event has not been resolved, it remains in active awareness and the victim may use strategies to cope with these feelings—a central feature of PTSD. These strategies may include trauma repetition, reenactment, or displacement of the abuse onto others. Additionally, research suggests that the younger the child at the time of the abuse, and the more severe, the more likely s/he is to develop PTSD symptoms, particularly emotional dysregulation, aggression, and impulsivity (Hien, Litt, Cohen, Miele, & Campbell, 2009). The child may develop an “aggressive” behavioral pattern in which s/he exploits others and engages in sexual and aggressive acts (Hartman & Burgess, 1988). The IPTM has been applied to adolescent female sex offenders based on the finding that female sex offenders tend to experience high rates of sexual victimization and PTSD (see Bumby & Bumby, 1997). However, this framework is in need of further empirical testing to determine its utility with this population, particularly female offenders who do not meet the diagnostic criteria for PTSD.

**Empirically Supported Risk Assessment**

More recently, efforts have been made to study this population using larger samples and more complete statistical analyses. This has been due, in part, to increased awareness of the problem of adolescent female sex offending as well as the
need for theory-driven and empirically-validated risk assessment. Among the primary goals of all sex offender research is to better understand which characteristics place offenders at the highest risk to re-offend; this information is then often used to aid in the legal and treatment disposition of these offenders (Barbaree & Marshall, 2006; Becker, 1990; Center for Sex Offender Management, 1999). Whereas a number of risk assessment instruments are being developed for use with male adolescent sex offenders, at present there is no empirically-validated system to determine which adolescent female offenders pose the highest risk to re-offend (Schmidt & Pierce, 2004).

Some studies have begun to fill this gap. One way that risk assessments are developed is by classifying offenders into typologies based on their presenting characteristics as well as the nature of their offense history (see Knight & Prentky, 1990). Mathews et al. (1997) offer one of the only empirically-derived preliminary typologies to date of adolescent female sex offenders. Based on a sample of 67 girls who had been referred for treatment following a documented history of sexual perpetration, they identified three preliminary offender subtypes: 1) a group who had committed a small number of offenses, were relatively sexually inexperienced, and appeared to be motivated by curiosity, whose histories of maltreatment and psychological difficulties were fairly limited; 2) a group who appeared to be sexually reactive, abusing younger children in a manner that mirrored their own victimization, and whose psychological problems were in the moderate range; 3) girls who engaged in more extensive and repeated behaviors and manifested higher levels of emotional disturbance, many of whom had experienced significant trauma from a young age. This
Much of the knowledge of adolescent female sex offenders has been gained by comparing them with adolescent male sex offenders. Such comparison studies can be informative because in order to conclude that girls constitute a unique group, it is necessary to compare them with other similar groups (Bumby & Bumby, 1995). Thus far, several of these studies have found that both female and male adolescent sex offenders share common characteristics, such as poor coping skills, relationship problems, cognitive distortions, and lack of empathy for victims, which may not be surprising given these are typical characteristics of most sex offenders (Center for Sex Offender Management, 2007). Additionally, many of the risk factors identified by the aforementioned descriptive studies, such as histories of abuse, neglect, and substance abuse, are also common among other offending groups, such as adult female sex offenders (e.g., Center for Sex Offender Management, 2007), adolescent male sex offenders (e.g., Barbaree & Marshall, 2006), and juvenile delinquents (e.g., Cauffman, Farruggia, & Goldweber, 2008). Thus it is unclear whether these factors are particularly relevant for adolescent female sex offenders or whether they represent more general risk factors for a variety of offending and problem behaviors.

In an innovative series of studies, Kubik, Hecker, and Righthand (2002) compared a sample of adolescent female sex offenders with an age-matched sample of adolescent girls with histories of non-sexual, “hands-on” offending such as assault ($N = 11$ in each group). Although the sex offending girls began offending at a younger age,
they were found to demonstrate significantly fewer antisocial behavior problems, including substance use problems and problems at school. These findings echo the mixed results of studies comparing sex offending and non-sex offending boys (see Milloy, 1994; Oliver et al., 1993; van Wijk, van Horn, Bullens, Biljeveld, & Doreleijers, 2005). Additionally, when Kubik et al. (2002) compared the same group of sex offending girls with an equal-size group of sex offending boys, they found few differences with respect to the type of offense they had committed, their attitudes about the offense (such as levels of denial), and their psychosocial and criminal histories. The only difference between the groups was that girls had experienced more physical and sexual abuse and neglect and had been exposed to more family violence than boys. Girls also reported that the nature of their own sexual abuse was more severe, and was more often perpetrated by someone known to them. However, it is noteworthy that Kubik et al. (2002) only reported descriptive statistics, so the effect sizes of these differences are unclear. Additionally, the small sample sizes make generalizability difficult. Nonetheless, this series of studies suggest that male and female sex offenders, as well as female sex- and non-sex offenders, may in fact share many features.

Other studies have found similar results. Bumby and Bumby (1995) compared 18 sex offending boys and 18 sex offending girls in an inpatient psychiatric facility and found that male and female offenders did not significantly differ in terms of depression and anxiety symptoms, suicidal thoughts/behaviors, past delinquency, or physical abuse history. Similar to Kubik et al. (2002), the main difference between the groups was that the girls were sexually victimized at significantly higher rates than boys.
Mathews et al. (1997) compared 67 sex offending girls and 70 boys who had been referred for either community-based or residential treatment following a documented history of sexual perpetration. They found the girls had experienced more extensive and pervasive childhood maltreatment and many had been exposed to the modeling of interpersonal aggression by females as well as males. The majority of the girls demonstrated repetitive patterns of sexual offending with multiple victims. These authors concluded that the girls had psychosexual disturbances equivalent to the comparison group of males yet similarly to Kubik et al. (2002), they did not use inferential statistics to support their conclusions.

Statistical limitations are among the major shortcomings of the aforementioned studies. For example, in the Mathews et al. (1997) study, the sample of girls was comprised of two non-similar groups (one from an intensive residential program and one from a community-based program) located in different parts of the country, and these groups were compared with a group of boys was from one treatment location. Because data were collected at different time points using different procedures, these limitations precluded the authors from using inferential statistics to test their hypotheses.

The largest published study to date that used statistical methods to measure differences between male and female adolescent sex offenders was conducted by Schwartz et al. (2006). These researchers compared a diverse sample (approximately 60% Caucasian) of 154 girls and 659 boys, aged 3-18, referred to the Massachusetts Department of Social Services, and found gender differences in two main areas: 1) girls were significantly more likely to have witnessed violence (84% versus 73%) and sexual deviance (42% versus 31%) in their homes; and 2) girls were significantly more likely to
have been sexually abused (81%, compared with 63% of boys), and for longer and by more perpetrators. There were no significant differences between groups in having been exposed to neglect (91 and 95%, respectively), physical abuse (81 and 83%), and psychological abuse (46 and 51%). Similar to the Mathews et al. (1997) study, each of these youth was evaluated using different methods, although these authors corrected for this limitation by developing a coding dictionary with good-to-excellent inter-rater reliability.

To summarize, despite some clinicians’ and researchers’ assertions that adolescent female sex offenders constitute a unique group, many of these studies’ methodologies were limited and one of their only consistent findings is that girls tend to have experienced high rates of severe sexual victimization at the hands of multiple perpetrators.

Adolescent Male Sex Offenders

Background

Sex offenses committed by adolescents have been much less studied than those committed by adults (Becker, 1988; Davis & Leitenberg, 1987; Groth, 1977; Prentky, Harris, Frizell, & Righthand, 2000; Weinrott, 1996; Zimring, 2004). Adult male sex offenders have been studied most extensively, which has led to well-developed and tested theories (Marshall & Barbaree, 1990; Marshall, Laws, & Barbaree, 1990), offender typologies (Anderson, Kunce, & Rich, 1979; Knight & Prentky, 1990; Knight, Rosenberg, & Schneider, 1985), knowledge about risk factors (Abel & Rouleau, 1990; Mann & Hollin, 2007; Marshall & Barbaree, 1990), recidivism (Bonta, Dauvergne, & Rugge, 2003; Craig, Browne, Stringer, & Beech, 2005; Hanson & Morton-Bourgon, 2005; Prentky, Lee, Knight, & Cerce, 1997; Ward & Ecclestone, 2004), and treatment
(Berlin, 2003; Marshall & Eccles, 1996; Marshall, 1999; Schwartz & Cellini, 1995). It has been questioned whether such findings apply to female (Bumby & Bumby, 1997; Mathews et al., 1997; Miccio-Fonseca, 2000) and adolescent (Barbaree & Marshall, 2006; Becker, 1990; Miller & Trapani, 1995; Miranda & Corcoran, 2000) sex offenders.

Existing guidelines for adolescent sex offender treatment and supervision have been primarily based on boys. In terms of safety and supervision issues, Schmidt and Pierce (2004) recommend that offenders be processed through the juvenile justice system to document their offenses; many youth can then be maintained in the community under supervision and treated in outpatient programs (Center for Sex Offender Management, 1999). Offenders who victimize young children require additional supervision to ensure they do not encounter potential victims, and high-risk offenders should be placed in residential or custodial programs to promote community safety. Accordingly, most adolescent male sex offenders remain in the community during treatment (Chaffin et al., 2002). Many boys engage successfully in outpatient treatment programs ranging from 8 – 28 months in length (Burton & Smith-Darden, 2000). Finally, the (Center for Sex Offender Management, 1999) recommends risk assessment to help place offenders in the most appropriate, least restrictive setting that meets their needs. Actuarial instruments, such as the Juvenile Sex Offender Assessment Protocol-II (J-SOAP-II; Prentky et al., 2000) and Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR; Worling, 2004), are currently being validated for use with adolescent males.

Theory

Initially, models of adolescent offending were built upon research on adult males (Kubik, 2002; Mathews et al., 1997). The first comprehensive review of adolescent male
sex offending was published in 1987 by Davis and Leitenberg and since then, a variety of theories have been proposed to explain sexually aggressive behavior among adolescent boys.

One of the most well-known theories—originally developed to explain child molestation among adult males—is a cognitive-behavioral theory developed by Finkelhor and Araji (1986), who argued that four preconditions must be met for offending behavior to occur. First, the offender must have a motivation to abuse—for example, his sexual needs are not getting sufficiently met or he has developmental difficulty connecting with same-age peers. Second, he must overcome internal inhibitions by rationalizing the abuse. This may be more possible if he has experienced abuse himself. Third, he must overcome external factors that may act as inhibitors to abuse—for example, gaining access to the victim. Finally, he must overcome the victim’s resistance, either through manipulation or coercion. Theories such as this have been generalized to inform the development of treatment programs for adolescent male sex offenders. Specialized inpatient and outpatient treatment programs are currently being used to treat thousands of offenders nationwide (see Barbaree & Marshall, 2006; Becker, 1990; Berliner, 1998; Center for Sex Offender Management, 1999). Many of these approaches are highly confrontational, targeting the denial, rationalization, and cognitive distortions that are commonly associated with offending, as well as teaching social skills to help offenders bond appropriately with same-age peers (see Abel, Mittelman, Becker, Rathner, & Rouleau, 1988; Becker, 1990; Marshall & Eccles, 1996).

Social learning theory (Bandura, 1969) has been used to explain how some boys who have been sexually victimized go on to sexually abuse others. For example, Gerber
(1990) argues that through being victimized, boys become familiar with the process of disempowerment and dehumanization. If the abuse begins at an early age, is chronic and frequent, and the experience is eroticized, the victim may be more likely to later develop offending behaviors. The victim may associate pleasure and arousal from experiencing and/or witnessing abuse (Center for Sex Offender Management, 1999). Indeed, considering most victims do not go on to become offenders, some authors have argued that perceptual variables are likely to be more explanatory of victim outcomes than simply learning offending behavior through one’s own victimization (Hindman, 1989; Ryan, 2002). Burton, Miller, and Shill (2002) conducted logistic regression analyses on a sample of 216 adolescent sexually victimized sex offenders and 93 adolescent sexually victimized nonsexual offenders and found that having been victimized by both females and males who used force most strongly predicted membership in the sex offender group. These authors concluded that these results generally supported social learning theory; however they note that a history of sexual victimization is common among all delinquent youth.

**Developmental Considerations**

Because juvenile correctional and sex offender treatment programs are over 90% male, this gender is the most convenient and accessible to study (Center for Sex Offender Management, 2007). Indeed, the seminal works on juvenile sex offender etiology (i.e., Barbaree, Hudson, & Seto, 1993; Becker, 1988), treatment (i.e., Barbaree et al., 1993; Becker, 1988) and recidivism (i.e., Worling, 2001; Worling, 2004) were based on males.

In part because the legal system has historically been built on the distinction between adults and juveniles, much of the research on adolescent male sex offenders
has focused on determining the extent to which they differ from adult male sex offenders. Some argue that this traditional gap between adolescents and adults is growing smaller due to legislative changes and waivers to adult criminal courts, particularly for sex offenders. Many experts in the sex offender field argue for developmental specificity in legal responses to juvenile cases, which would take into account the fact that only a small proportion of adolescent offenders go on to exhibit lifelong offending behavior (see Zimring, 2004).

Developmental psychologists tend to describe adolescents as differing from adults in several key areas, including susceptibility to peer influence, attitudes regarding risk, ability to adopt a future orientation, capacity for self-management, and level of brain/cognitive development (Steinberg, 2009). Indeed, adolescent sex offenders have been shown to differ from adult sex offenders in several ways. First, adolescents and adults commit different types of offenses. Adolescent offenders have fewer victims and tend to display less serious and violent behaviors than adults (Becker, 1988; Becker, 1990; Miranda & Corcoran, 2000). Adolescents do not typically offend against adults; approximately one third of sexual offenses against children are committed by teenagers (Davis & Leitenberg, 1987; Snyder & Sickmund, 1999). Second, most adolescent offenders are not sexual predators, do not have deviant sexual arousal and/or deviant sexual fantasies, and do not meet the DSM-IV-TR criteria for pedophilia (American Psychiatric Association, 1994; Becker, Hunter, Stein, & Kaplan, 1989). Considering many paraphilias develop during puberty and research suggests that adolescents’ sexual arousal patterns are more changeable than adults’ (Hunter & Becker, 1994; Hunter, Goodwin, & Becker, 1994), intervention during adolescence may be particularly
helpful (Groth, Longo, & McFadin, 1982). Adolescent offenders often respond well to treatment, particularly when it includes individual, group, and family modalities (Barbaree & Marshall, 2006). Finally, recidivism rates for adolescent sex offenders are typically lower than for adults. Outcome studies demonstrate that not all adolescent sex offenders become adult sex offenders; in fact, their rates of sexual re-offense (5-14%) have been found to be significantly lower than their rates of re-offense for other delinquent behaviors (8-58%; Worling & Curwin, 2000) and the sexual recidivism rates of adult sex offenders (7-36%; Harris & Hanson, 2004). Offenders who have successfully completed treatment have been found to have even lower rates (Barbaree & Marshall, 2006; Becker, 1990; Center for Sex Offender Management, 1999; Worling & Curwin, 2000). For example, a 10-year follow-up study of 261 adults who were released from sex offender treatment programs as adolescents found that less than 5% were subsequently arrested for another sex offense (Waite et al., 2005).

Comparing Sex Offending Boys and Girls

Whereas many of the risk factors for offending among adolescent males are similar to those that have been studied among adolescent females, sexual arousal and impulsivity have been more studied among boys than girls. The Center for Sex Offender Management (1999) notes that up to 80% of these boys have a diagnosable psychiatric disorder, most commonly conduct disorder, ADHD, and paraphilias (Kavoussi, Kaplan, & Becker, 1988) which, incidentally, have higher prevalence rates among males than females in the general population. Exposure to family violence has also been found to be linked to sexual offending in adolescence as well as severity of psychosexual disturbance (Ryan, Miyoshi, Metzner, Krugman, & Fryer, 1996; Schwartz et al., 2006; W. R. Smith, 1988).
The role of childhood victimization as a risk factor among male offenders has been controversial. As has been observed among adolescent female offenders, a significant proportion of males have been sexually abused; however, this proportion appears to be smaller than was initially believed. Research suggests that in fact, most adolescent male offenders have not been victimized (Chaffin, Bonner, & Pierce, 2003; Hanson & Slater, 1988) and studies using polygraph testing have found that once they are tested, these boys often reveal significantly lower rates of childhood sexual victimization than they had before testing (see Hindman & Peters, 2001). In fact, the largest meta-analysis to date examining childhood victimization as a predictor of sexual re-offending—which covered 28,972 sex offenders from six countries—concluded that childhood victimization is not a predictor of sexual recidivism (Hanson & Bussière, 1998). Some authors have concluded that based on current evidence, sexual victimization should not be seen as a necessary or sufficient causal variable for the development of sex offending among adolescent males (Burton et al., 2002).

The major models of adolescent sex offender etiology (e.g., Becker, 1988; Ryan, Lane, Davis, & Isaac, 1987) and treatment (e.g., Becker, 1990) have been based on exclusively male samples and more research is necessary to determine the degree to which theories developed to explain adolescent male sex offending apply to females. Some decidedly do not, in that they do not even include females in their conceptualization of sexual offending: for example, some feminist authors, most notably Brownmiller (1975), consider rape to be an act of violence committed by men who are socialized to degrade women. On the other hand, theories such as that by Finkelhor and Araji (1986) may include aspects that apply to sex offending girls. For example, the
notion of seeking emotional congruence with a child may be particularly salient for girls who feel the need to re-enact their own childhood victimization. It is less clear whether other aspects of this theory, such as gaining access to victims and coercing them, apply for female offenders given they are often in a caregiving role and do not typically coerce their victims (Schmidt & Pierce, 2004; Vandiver & Teske, 2006). Considering Finkelhor and Araji’s (1986) theory was originally developed to conceptualize adult male child molesters, its current applicability to adolescent girls is questionable.

Social learning theory may hold some promise for explaining how adolescent females who have been sexually victimized go on to victimize others. Girls may model and/or re-enact the sexually violent behavior that they have experienced as part of the “cycle of violence” (e.g., Widom, 1989). It is less clear how exposure to other types of aggression, such as domestic violence, affects girls. For example, exposure to violence against females has been found to predict sex offending among adolescent boys (Hunter, 2004). Such negative images of women may impact girls’ development and self-concept (Cauffman, 2008), but more research is necessary to determine whether they influence the development of sexually aggressive behavior.

In terms of risk factors, some models which were originally developed for adolescent boys could also apply to adolescent girls. The multifactorial model proposed by Becker (1988) posits that a combination of individual (i.e., childhood physical and sexual abuse, impulse control), family (i.e., poor parenting), and environmental (i.e., peer) factors put adolescents at risk for committing sex offenses. More research is necessary to determine whether meaningful gender differences exist for these factors.
For example, the influence of antisocial peers may be more relevant for boys, whereas childhood victimization may be more salient for girls (Belknap & Holsinger, 2006).

Finally, Mathews et al. (1997) argue that treatment programs for adolescent males may not be adequate for adolescent girls, particularly if girls are found to be a unique group. Although many authors continue to argue that victimization plays a large role in the etiology of offending among females, meta-analyses such as that by Hanson and Bussière (1998) did not report whether any of the studies they reviewed included female offenders. If victimization is found to be a stronger predictor of offending for females than males, then treatment programs may need to be modified to include a greater focus on these issues.

**Adult Female Sex Offenders**

**Background**

Of all adults who come to authorities’ attention for sex crimes, less than 10% are women (Federal Bureau of Investigation, 2006). However, as with offenses committed by adolescent girls, those committed by women are underreported to authorities: Results of National Crime Victimization Surveys, which capture information from victims that may or may not have been reported to authorities, have found that females comprise up to 6% of sex offenders acting alone and 40% acting with co-offender(s) (Bureau of Justice Statistics, 2006). Schwartz and Cellini (1995) reviewed multiple sources of victimization data and found that up to 63% of female and 27% of male victims report having been victimized by a female. Hunter and Mathews (1997) write that “the lack of public and professional cognizance of female sexual offending and its detrimental effects services to deprive both the victims and the female who perpetrate against them of needed familial and professional support and intervention” (p. 465).
Adult female sex offenders often go unnoticed and can disguise their offenses while engaging in routine caregiving activities such as dressing and bathing (Groth & Hobson, 1997). Accordingly, many victims may not view the actions against them as abuse (Elliott & Briere, 1994). Sex role stereotypes also impact reporting rates—victims are less likely to report the abuse if they doubt it will be taken seriously (Ford, 2009; Righthand & Welch, 2001; Travin et al., 1990). Indeed, juries may only convict females for the most serious offenses (i.e., forcible rape) and may be less willing to convict for lesser charges, such as fondling, particularly if custody issues are involved (Finkelhor, 1984; Mayer, 1992). Additionally, male victims may be reluctant to disclose victimization due to fears of being viewed as emasculated and/or stereotypes that hold an adolescent male’s sexual experience with an older woman is a rite of passage or a fortunate encounter (Frei, 2008; Hunter & Mathews, 1997) whereas female victims may question, or fear that others may question, their sexual identity (Hislop, 2001). Highly-publicized cases may also contribute to misconceptions about females as perpetrators (Center for Sex Offender Management, 2007). Finally, because female offenders often co-offend with a male who may appear more aggressive and initiate more invasive abuse (Kaufman, Wallace, Johnson, & Reeder, 1995), victims may be more likely to view the male offender as the instigator/aggressor (Faller, 1987). These perceptions may lead to differences in judicial processing of these cases, and the females in the judicial system tend to comprise the most severe cases because these are the most likely to be convicted (Chesney-Lind & Shelden, 1998). Clinicians may also hold biases which affect their treatment of female sex offenders and their victims. Research indicates that cases involving female offenders are often met with skepticism, and the offenses
viewed as less harmful, than those involving male offenders (Denov, 2004; Ford, 2009). In sum, the cultural stereotypes held by victims, as well as law enforcement and other professionals involved in these cases, contribute to the misunderstanding of female sex offenders and their victims (Kasl, 1990).

Theory

Considering many adult female offenders have relational difficulties and meet the criteria for avoidant and dependent personality disorders, Green (1999) applied object relations theory to explain child molesting committed by adult females. He proposed that women may identify both as the aggressor and the victim in these offending scenarios: as the adult offender, who represents the person who victimized them in the past (usually a close family member), and as the child victim, who is a representation of their child identity. Many women also utilize defense mechanisms such as denial (i.e., trivializing the offense) and projection (i.e., attributing a seductiveness to their child victims) to justify this behavior (Green, 1999; Mathews, Matthews, & Speltz, 1990).

Similar to the notion of “blockage” in Finkelhor and Araji’s (1986) model, qualitative studies with adult female offenders suggest that some women may molest children as substitutes for adult male partners, leading some experts to conclude that these women have difficulty connecting with same-age peers due to low self-esteem and/or social immaturity (Green, 1999; Matthews et al., 1991). Indeed, many offenders report feeling isolated and craving attention and closeness from their victims, and report fantasies involving the victim which involve feelings of love rather than sexual arousal (Mathews et al., 1990).

Sex-role theory (e.g., Hoffman-Bustamante, 1973) purports that women’s participation in violent crimes tends to be in ways that reflect gender roles and
socialization, and accordingly women play secondary roles, acting as co-offenders alongside males who are more likely to initiate the offending behavior (Naffin, 1985). Whereas sex-role theory lacks specific research support among this population, adult female sex offenders are much more likely to act with a co-offender than are adult male sex offenders (Mathews et al., 1990). From a feminist perspective, female offenders’ reliance on male co-offenders, in conjunction with the domestic violence and unbalanced power dynamics that are often present in these relationships, is rooted in cultural male dominance (Kasl, 1990). In fact, the motivation for female sex offending behavior may heavily depend on whether she acts with a co-offender: Qualitative studies interviewing women who acted in concert with a male have found that these women describe some of the major motivations for their behavior as dependence on and/or fear of their male co-offenders (Mathews, Matthews, & Speltz, 1989), and many adult female offenders describe experiencing extreme feelings of inferiority and a lack of assertiveness with peer-aged men (Mathews et al., 1990). Thus whereas relational factors appear to be a consistent theme among these women, they appear to range from love-based to fear-based motivations.

Kasl (1990) posits that the underreporting of sexual offenses committed by females is based on societal rules and argues the acknowledgement of female offending challenges the role of females as “victims” and males as “offenders” that currently exist in our society. She argues that in contrast to male offending, which is typically defined in terms of rape and penetration, female sex offending is difficult to define, considering society expects women to have a certain degree of bodily contact with children as part of their caregiving roles. Sex-role stereotypes may force women to
outwardly bury their needs for power and subsequently act aggressively in secret against those who are “beneath” them by abusing younger children and/or teenagers (Kasl, 1990). Finally, Western society has sexualized intimacy to a large degree, thus female offenders may equate their sexual acts with providing them the emotional intimacy they desperately desire (Kasl, 1990). Many feminist theorists argue that based on societal gender dynamics, female offenders must be considered distinct from men and “sexual abuse by females [should] not be seen as simply parallel to male abuse” (Mathews et al., 1990, p. 261).

Empirical Findings

Research has begun to shed light on adult female sex offenders, suggesting that in some ways, adult female offenders are similar to male offenders: mental health problems, particularly personality and substance use disorders (Lewis & Stanley, 2000; Nathan & Ward, 2002) and difficulties in intimate relationships are common (Mathews et al., 1989; Matthews et al., 1991; Vandiver & Kercher, 2004). Additionally, offenses committed by women may be more violent than previously expected and often closely resemble those committed by males (Lewis, Shankok, & Pincus, 1979; Lewis & Stanley, 2000).

However, female and male sex offenders appear to differ in other respects. Women tend to report more extensive histories of childhood maltreatment, specifically sexual victimization (Fehrenbach & Monastersky, 1988; Lewis et al., 1979; Lewis & Stanley, 2000; Mathews et al., 1991; Righthand & Welch, 2001). Women also typically offend against younger victims who are known to them (Fehrenbach & Monastersky, 1988; Lewis & Stanley, 2000; Mathews et al., 1989; Matthews et al., 1991; Rudin, Zalewski, & Bodmer-Turner, 1995; Vandiver & Kercher, 2004). Also, unlike males, as
many as 3 in 4 females act with a co-offender (Faller, 1987; Vandiver & Kercher, 2004) who is often a male with whom she is in an abusive intimate relationship (Lewis et al., 1979; Lewis & Stanley, 2000; Righthand & Welch, 2001). Descriptive studies suggest that many of these women are unhappy in these relationships often due to feelings of exploitation but remain in them because of strong dependency needs (Mathews et al., 1989).

Allen (1990) compared 65 female and 70 male child molesters and found female offenders reported being in less stable romantic relationships and having experienced more physical and sexual abuse than males. The females were less likely to admit to their crimes and feelings of guilt surrounding them. The women were significantly younger than the men, a finding that has been found among other samples as well (see Vandiver & Teske, 2006). Similarly, Miccio-Fonseca (2000) compared clinical groups of 18 female sex offenders with 332 male sex offenders and found that the females had a higher history of suicidality and had been sexually abused significantly more than the males. There were no significant differences in number of life stressors (i.e., divorce, loss, financial problems, change in residence) and familial psychiatric problems and violence.

Given these differences, many authors have concluded that the schemes developed for male sex offenders do not hold for females (Atkinson, 2000; Vandiver & Kercher, 2004). For example, some have argued that sexual gratification is not the main motivator for female perpetrators (Groth, 1979). In a unique study comparing the modus operandi of female and male sex offenders, Kaufman et al. (1995) interviewed victims and found that females were more likely to act with a male co-offender and exploit their
victims (i.e., by using other adults to abuse the victim), whereas male were more sexually invasive in their abuse and used material bribes to obtain victim cooperation. There also appear to be gender differences in the types of offenses committed: men were significantly more likely to engage in anal and oral intercourse, whereas females penetrated victims with objects (Kaufman et al., 1995).

Research generally does not suggest that most female perpetrators are highly disturbed or psychotic at the time of their offense (Faller, 1987), but they may experience mental health problems. For example, Green and Kaplan (1994) compared 11 incarcerated female child molesters with 11 incarcerated women who had committed nonsexual crimes and found that the sex offenders were more psychiatrically impaired than the non-sex offenders. Male sex offenders are more likely to be diagnosed with a paraphilia and female sex offenders with PTSD (Center for Sex Offender Management, 2007), leading some to suggest that males may be more motivated by deviant sexual interests coupled with psychopathy and aggression, whereas females may be more motivated by relational issues such as dependency on co-offenders and/or reaction to their own victimization (Kasl, 1990).

The most comprehensive empirically-derived attempt to classify female offenders into typologies was conducted by Vandiver and Kercher (2004), who used hierarchical loglinear modeling and cluster analysis to classify 471 adult female sex offenders into groups based on offender and victim demographics. They found the most common group were “heterosexual nurturers,” comprised of young middle-aged women who offended against younger male victims while in caregiving situations. Other groups were noncriminal homosexual offenders, sexual predators, young adult child exploiters,
homosexual criminals, and aggressive homosexual offenders. Similar typologies have been suggested by others as well (e.g., Faller, 1987; Mathews et al., 1989). Terry (2006) notes that these typologies are somewhat different from those that have been developed for male sex offenders: For example, the well-known typologies developed by Knight and Prentky (1990) do not include a nurturer/caregiver category. This discrepancy suggests meaningful gender differences may exist among sex offenders in terms of their history, motivation, and victims. Furthermore, whether a woman offends alone is one of the distinguishing characteristics of offender typologies (Mathews et al., 1990). In terms of recidivism, women who offend alone are typically considered to present the greatest risk (Vandiver & Kercher, 2004); however, women’s rates of reoffending are generally lower than men’s (Cortoni & Hanson, 2005).

Because this area of study is so recent, additional research is necessary to support these findings. Additionally, much of the existing research is qualitative in nature, based on small samples in clinical settings (Terry, 2006). Although these studies provide valuable descriptive information, their results are not sufficient to draw reliable inferences about this group as a whole and may fail to reflect that these women constitute a heterogeneous group (Center for Sex Offender Management, 2007; Matthews et al., 1991; Mayer, 1992).

Treatment models for adult female sex offenders are in the process of being developed. Addressing these women’s own experiences of victimization may be important as a history of abuse may have impacted their ability to regulate emotions which may limit their capacity to cope effectively with life stressors (Hislop, 2001; Hunter et al., 2006). Other recent recommendations for treatment include exploring healthy
sexuality; addressing power dynamics; treating comorbid mental health issues, such as trauma, mood, and substance-related disorders; helping improve social support; and teaching healthy coping skills to manage the stress and negative emotional states that these women often experience (see Ford, 2009).

**Comparing Adult and Adolescent Sex Offenders**

Existing literature suggests that adolescent females may be similar to adult female offenders in some ways, which may not be surprising given some adult female offenders began offending during their youth (Center for Sex Offender Management, 2007; Terry, 2006). Similar to women, girls who have committed sex offenses have experienced high levels of sexual abuse (Bumby & Bumby, 1993, 1997). Indeed, sexual victimization among female offenders appears consistent across the lifespan: Rates of sexual victimization among prepubescent female sex offenders have been found to be very high as well (> 90% in some samples; Johnson, 1989). High rates of mental health problems including suicidality and PTSD are also common among adult and adolescent female offenders (Green, 1999; Miccio-Fonseca, 2000).

However, unlike women, girls tend to offend alone, particularly when the offense occurs within a caregiving context such as babysitting (Center for Sex Offender Management, 2007; Hunter et al., 2006). For example, none of the girls in the Fehrenbach and Monastersky (1988) study acted with a co-offender, which is of particular consideration given females who offend alone have been found to have higher recidivism rates than those who act with a co-offender (Williams & Nicholaichuk, 2001). Although this difference may simply represent the nature of the situations in which these girls have access to victims, it calls into question the assumption that
females consistently rely on males to assist them in their crimes and may in fact represent a meaningful difference in offending motives.

One notable finding of the Allen (1991) child molester study was that more women than men reported that they had experienced parental physical abuse and run away from home during their adolescence. Longitudinal studies could help us better understand the unique developmental characteristics of female offenders and what makes those who begin offending in adolescence continue this behavior into adulthood (Center for Sex Offender Management, 2007). Furthermore, adolescence represents a critical period for intervention (Barbaree & Marshall, 2006; Becker, 1990; Center for Sex Offender Management, 1999) given that girls often lack role models for healthy sexuality, education programs could be particularly helpful in reducing offending behavior (Chesney-Lind & Shelden, 1998).

**Female Juvenile Delinquents**

**Background**

As with adolescent females who commit sexual offenses, adolescent females who commit non-sex-based crimes do so at substantially lower rates than adolescent males (Moffitt et al., 2001). Typically, literature on male delinquency has been generalized to females (Belknap & Holsinger, 2006; Chesney-Lind & Shelden, 1998) and most juvenile correctional education programs and assessments have been developed based on knowledge of male offenders (Miller & Trapani, 1995). Many authors argue for more studies which examine delinquent girls—the “forgotten few” in the justice system (Bergmann, 1989; Cauffman, 2008).
Males’ and females’ pathways to delinquency likely reflect gender differences in development, problem behaviors, and societal responses to problem behavior (Belknap & Holsinger, 2006; Daly & Chesney-Lind, 1988). Literature on adolescent development suggests that whereas boys tend to report improved self-esteem and self-concept during adolescence (Miller & Trapani, 1995), girls’ experience is often the opposite and may include increases in depression and suicide attempts (Rosenthal, 1981; Rutter, 1986) and lower levels of resilience (Block, 1990). When these problems are combined with other issues such as victimization, poverty, and poor school performance, they may result in increased risk for offending (Sharp & Simon, 2004). Some risk factors for delinquency may affect girls more negatively than boys (Belknap & Holsinger, 2006): Research indicates that interpersonal problems may play a greater role in the development of girls’ delinquency (Ehrensaft, 2005). Feminist authors such as Gilligan (1982) posit that relationships play an important role in girls’ moral development; relational problems during critical developmental periods such as childhood and adolescence may result in later problems with moral judgment and decision-making, which are common among delinquent girls.

“Feminist pathways” theory posits that childhood events, particularly traumas, are risk factors for girls’ offending, and patriarchy must be central to the study of causes of delinquency in order for this phenomenon be fully understood (Daly & Chesney-Lind, 1988; Holsinger, 2000). Pathways approaches specifically advance the need to identify childhood traumas as precursors to delinquency among girls (Belknap & Holsinger, 2006). One implication of this theory is that improved response to, and early intervention with, abused children is crucial in deterring delinquency (Belknap & Holsinger, 2006).
The “cycle of violence” theory (i.e., Widom, 1989), which suggests that transmission of violence occurs intergenerationally, offers a similar explanation for the high rates of abuse among juvenile delinquents. Proponents of the theory cite research, such as a large longitudinal study of girls and boys which found that abused/neglected girls were nearly twice as likely to be arrested as juveniles, twice as likely to be arrested as adults, and over twice as likely to be arrested for violent crimes, as evidence (Widom, 2000). However, this theory does not describe why the vast majority of abused youth do not go on to victimize others (Kaufman & Zigler, 1987). Additionally, research suggests that early childhood victimization does not put one at a higher risk for continuing a life of crime: approximately the same proportion of nonabused and abused youth go on to commit crimes as adults (e.g., 53% versus 50%; Widom, 1989). It thus appears that a small proportion of females and males go on to develop persistently antisocial lifestyles, perhaps regardless of the risk factors to which they have been exposed (Widom, 2000). It may be that individuals with a “trait”-like propensity for antisocial behavior may engage in offending no matter what their background, whereas those with “state”-like, adolescent-limited antisocial behavior may engage in offending as a reaction to negative life experiences such as victimization (Moffitt et al., 2001). Indeed, the DSM-IV-TR specifies separate categories for antisocial behavior during adolescence (conduct disorder) versus adulthood (antisocial personality disorder), in part to distinguish these types of individuals (American Psychiatric Association, 1994). Nonetheless, victimization does appear to present a strong risk factor for some youths’ delinquent behavior and support for the “cycle of violence” theory may be particularly
helpful in determining whether delinquent youth learn violent behavior through modeling.

**Risk Factors for Girls’ Delinquency**

A variety of risk factors have been found to contribute to adolescent female delinquency, including low IQ and lack of empathy (Hunter et al., 2006), family problems (Bloom, Owen, Deschenes, & Rosenbaum, 2002; Cauffman, 2008; Odgers, Moretti, & Reppucci, 2005), and psychobiological factors (Bartol, 2006; Lahey et al., 2006). These risk factors also predict delinquency among boys (Cauffman, 2008). However, research indicates that delinquent girls differ from boys in terms of mental health problems and victimization history. Studies have found higher rates of PTSD (Cauffman, Feldman, Waterman, & Steiner, 1998) and depression (Dodge, Coie, & Lynam, 2006) among girls in juvenile justice and related mental health settings than among both non-delinquent girls and delinquent boys. Although prevalence rates of conduct disorder are generally lower for girls than boys, once a girl meets the criteria for conduct disorder, she is more likely to also meet the criteria for another disorder, such as ADHD, a mood disorder, and/or a substance use disorder (Loeber & Keenan, 1994). In a recent study, Cauffman, Lexcen, Goldweber, Shulman, and Grisso (2007) compared matched samples of delinquent and non-delinquent girls and boys and found that whereas non-delinquent girls reported more depressed and anxious symptoms than non-delinquent boys, the mean difference between delinquent girls and boys was twice as much. Finally, female juvenile delinquents have been found to be significantly more likely than male juvenile delinquents to express suicidal ideation (Ambrose & Simpkins, 2003; Trulson et al., 2005).
Similar to sex offending girls, delinquent girls tend to have been exposed to high levels of physical and sexual victimization (Belknap & Holsinger, 2006; Cauffman, 2008). Rates of victimization among incarcerated girls have been found to be as high as 80-90% (Acoca & Dedel, 1998; Ambrose & Simpkins, 2003). Research suggests that a large proportion of this abuse is incestual: In one study of 163 delinquent girls, three-fourths of the abuse was perpetrated by a family member (Belknap & Holsinger, 2006). Additionally, studies comparing female non-sexual offenders with general female samples have revealed that delinquent females report significantly higher levels of victimization than the female population as a whole (Chesney-Lind & Rodriguez, 1983; Dembo, Williams, Wothke, & Schmeidler, 1992). Some authors have suggested that girls may commit offenses as a way of escaping their abusive homes through institutional placement (Moore, 1999). For example, in their study of 163 incarcerated girls and 281 incarcerated boys, Belknap and Holsinger (2006) found that significantly more girls than boys reported they would rather be in legal custody than home. High rates of psychopathology have been found among delinquent youths’ families, which may contribute to a problematic home environment (Cloninger & Guze, 1973).

Consistent with high rates of victimization, many delinquent girls present with symptoms of trauma-related mental health problems. For example, lifetime prevalence rates of PTSD symptoms among incarcerated adolescent females has been found to range from 50 - 67% (Cauffman et al., 1998; Horowitz, Weine, & Jekel, 1995; Mathews et al., 1997) versus approximately 9-11% among general adolescent female samples (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; Rutter, 1986). The Cauffman et al. (1998) study found that boys were more likely to be traumatized as observers of
violence whereas girls were more likely to be traumatized as direct victims, and some research suggests that being a victim of violence is more likely to lead to mental health problems than witnessing violence (Finkelhor, 2007). PTSD may be accompanied by other disorders such as substance use disorders which often develop in adolescence as a way to cope with PTSD and other comorbid symptoms such as depression (see Hien et al., 2009). Co-morbid diagnoses of Oppositional Defiant Disorder (ODD) are also common; interestingly, Sharp and Simon (2004) note that girls are often misdiagnosed with ODD when actually a PTSD diagnosis would be more appropriate. This may result in their receiving treatment that focuses more on aggressive or violent behavior than trauma history (Ambrose & Simpkins, 2003). Considering that epidemiological studies suggest that sexually assaulted girls are four to five times more likely to develop PTSD than non-assaulted girls (Kilpatrick et al., 2003), taking victimization and trauma into account could improve treatment outcomes. In fact, based on their nationwide study of over 4,000 adolescents, the authors of the National Survey of Adolescents concluded that the link between victimization and delinquency is so strong among girls that “policies that promote the prevention of child and adolescent victimization also would promote the prevention of… delinquency” (Kilpatrick et al., 2003, p. 13).

Comparing Sex Offending and Delinquent Girls

Adolescent female sex and non-sex offenders may share many common characteristics, which may not be surprising given that among adolescents, different types of violent offending may reflect common etiologies (Lewis et al., 1979). In other words, an adolescent who commits a sexual assault and an adolescent who commits a non-sexual assault have likely been exposed to many similar risk factors. More research
is needed to determine whether juveniles who commit sexual assaults are significantly different from those who commit other types of violent assaults.

Considering that both sex offending and delinquent girls are usually not only victimized by acquaintances or family members but also typically choose victims who are known to them, a better understanding of how relational issues influence the development of girls’ delinquency could also inform our knowledge of girls’ sex offending behavior. Finkelhor (1990) notes that because many cases of child sexual abuse occur as the result of manipulating the victim’s trust, many victims develop attachment problems; adolescents with insecure and preoccupied attachments tend to have poorer social skills and a greater tendency for engaging in delinquent behavior than more securely attached youth (Allen et al., 2002). Theories such as Relational-Cultural Theory (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991), which posits that girls’ development is based on connection with others, may be particularly helpful in developing prevention and education programs for sex and non-sex offending girls (Foley, 2008). Some authors suggest that “the formation of social bonds may turn out to be the central explanation for desistance from crime after adolescence” (Smith, 1995, p. 430).

There is ongoing controversy in sex offending research regarding whether sex offenders are qualitatively distinct from general offenders. In criminology, this is referred to as “specialization,” or the degree to which offenders commit primarily sexual crimes (Zimring, 2004). Traditionally, many researchers and treatment experts have contended that sex offenders are a group with characteristic problems and treatment needs; however, research suggests sex and non-sex offenders may be more similar than was
previously assumed. A number of studies which compared adolescent sex offenders with other juvenile offenders found few significant differences between these groups in terms of various personality traits, cognitive capabilities, and family characteristics (Awad, Saunders, & Levine, 1984; Becker & Hunter, 1997; Jacobs, Kennedy, & Meyer, 1997; Spaccarelli, Bowden, Coatsworth, & Kim, 1997; van Wijk et al., 2005). Additionally, recent research suggests that therapies that were initially developed to treat non-sexual delinquency may also be effective for treating sex offending behavior (Borduin, Schaeffer, & Heiblum, 2009). Some research has revealed differences between these types of offenders: In one of the few published studies to compare female sex and non-sex offenders, Miccio-Fonseca (2000) found that sex offenders had more legal problems, a more extensive history of psychiatric hospitalization, greater relationship difficulties, and more academic problems than the non-sex offenders. However, these results may reflect the fact that the group of sex offenders ($N = 18$; average age 22) was much smaller, and on average younger, than the group of non-sex offenders ($N = 215$; average age 34), so it may have represented individuals who were more dysfunctional than the group of non-sex offenders. Additionally, because the study included both women and girls in both groups, it is difficult to conclude how these results apply to adolescent offenders as a whole.

**Adolescent Sex Offending: A “Gender Paradox?”**

Because girls generally have low base rates of offending behavior compared to boys, the girls who do offend may differ significantly from those who do not (Cauffman et al., 2007). Some researchers in the sex offending field propose that girls who sexually offend must subsume a higher level of risk than boys. For example, Matthews et al. (1997) suggest that “biological and socialization factors create a higher threshold
for the externalization of experienced developmental trauma in females than males” (p. 194). This notion is not new: the “group resistance” hypothesis, proposed by Taylor and Ounsted (1972), posited that females who commit crimes represent the greatest degree of individual psychopathology because their societal status as females offers them greater resistance to crime than males. It has been suggested that “female delinquency itself is a symptom of significant mental health problems” (Cauffman, 2008, p. 124) and some authors have argued that a “gender paradox” exists wherein girls must surmount a higher threshold of risk than boys to engage in antisocial behavior (Taylor & Ounsted, 1972). Feminist theorists posit that this threshold is raised because girls are socialized to be less aggressive and disobedient than boys (Christiansen, 1997), whereas a neurodevelopmental approach assumes that girls’ genes and environments must be more seriously afflicted than boys’ in order to evidence problems that, under typical conditions, are much more common among boys (Gualtieri & Hicks, 1987).

Indeed, some evidence suggests that, although smaller in number, girls who commit violent offenses have been exposed to more risk factors than boys (Lederman, Dakof, Larrea, & Li, 2004; Silverthorn & Frick, 1999). Some proponents of the gender paradox hypothesis cite higher rates of comorbid psychopathology among offending females as evidence (Loeber & Keenan, 1994). However, considering girls generally tend to have higher base rates of psychopathology (especially depression and suicidality) and mental health comorbidity is one of the major risk factors for juvenile delinquency (Cauffman, 2004; Grisso, 2008; Monahan et al. 2001) and recidivism (Kazdin, 2000; Trulson et al., 2005), it is unclear whether mental health problems, in of themselves, constitute distinct risk factors for girls. Goldweber, Broidy, and Cauffman
(2009) suggest that whereas co-morbid mental health problems and interpersonal victimization are risk factors for delinquency among males and females, they are particularly relevant for females.

The “gender paradox” hypothesis has never been empirically tested among adolescent sex offenders, and the research that has tested this hypothesis among juvenile delinquents has failed to consistently support it (see Eme, 1992, for a review). One of the few studies to specifically test the hypothesis among adolescents was conducted by Moffitt et al. (2001). They compared a community sample of boys and girls with and without conduct disorder diagnoses on various childhood risk factors, including family predictors (i.e., years with single parent, family socioeconomic status); cognitive and neurological predictors (i.e., IQ score, memory score); childhood behavioral predictors (i.e., teacher/parent report of hyperactivity); peer relations predictors (i.e., peer rejection, peer delinquency); and personality trait predictors (i.e., self-control, stress reactivity). They tested whether there was a more extreme group difference among girls than boys, and found the only group differences were in the direction opposite to the paradox prediction. Moffitt et al. (2001) concluded that although fewer girls than boys in this sample overall became antisocial, the antisocial girls’ etiology was not necessarily more severe than the boys’. Instead, fewer girls ended up becoming antisocial because they experienced lower levels of a wide variety of risk factors. These authors assert that studies which conclude that delinquent girls are exposed to more risk factors tend to be limited to incarcerated youth whose cases are more severe and would be expected to have surmounted a higher threshold of risk to end up in the correctional system in the first place. These findings are consistent with
criminological literature asserting the causes of delinquency to be essentially the same for males and females (Gottfredson & Hirschi, 1990; Hubbard & Pratt, 2002; Simourd & Andrews, 1994). Indeed, Broidy and Agnew (1997) conclude that “gender differences, to the extent that they exist, involve differences in degree rather than kind” (p. 296, emphasis in the original). They argue that the picture is not one in which different factors explain male and female criminality, but that different degrees of those factors predict delinquency. Finally, Hubbard and Pratt (2002) argue that the fact that females are more likely to be victims of the abuse could disproportionately increase the probability of females engaging in criminal behavior as a result of such abuse.

**General Summary**

A history of sexual abuse is a frequently proposed causative factor of sexual offending that fits within several general theories, such as conditioning of arousal, modeling, and identification with the perpetrator (Finkelhor & Browne, 1985; Finkelhor, 1990; Ryan et al., 1987). Accordingly, the majority of existing residential and outpatient-based programs for adolescent sexual offenders include a treatment component to address the victimization histories of these young offenders (Burton & Smith-Darden, 2000). Most programs provide this service based upon the assumption that victimization is one of the etiological precursors to sexual offending; however, Burton et al. (2002) note that few, if any, empirically-based practice models clearly explicate the relationship between victimizing and offending in a way that indicates exactly how clinical resolution of resulting trauma can be achieved, and for whom. In addition, if victimization is related to nonsexual criminal behavior as well, treatment for victimization among non-sex offending juvenile delinquents may need revisiting (Burton et al., 2002).
Meta-analyses have found that the effects of sexual abuse are more severe for females than males (Rind & Tromovitch, 1997). This may be because females’ experiences include incest and/or because females are often younger than males at the time of victimization (Baker & Duncan, 1985). Additionally, these effects may interact with the effects of other types of abuse to produce more vulnerability to later problems. Indeed, recent research suggests that investigating multiple types of victimization may explain more of the variance in the development of subsequent problems than studying one type of victimization alone. Finkelhor, Ormrod, and Turner (2007) studied the effects of “poly-victimization,” which they define as exposure to four or more of the following in one year: sexual victimization, physical assault, property victimization, maltreatment, and witnessing victimization. In a nationally representative sample of over 2,000 children aged 2-17, they found that poly-victimization was not only highly predictive of trauma symptoms, but when taken into account, greatly reduced the association between individual types of victimizations (e.g., sexual abuse) and symptomatology. Whereas research consistently suggests that victimization is a risk factor for future problems of many types, one of the aims of this study is to help determine the degree to which it represents a particularly strong risk factor for girls to engage in sexual offenses rather than general delinquency.

Another reason adolescence may be a particularly salient period to study is that it appears to be a time in which sex differences in patterns of antisocial behavior diminish. Although males have been found to be consistently more antisocial than females across various samples, developmentally-relevant constructs, and countries, the magnitude of sex differences in antisocial behavior typically decreases around the time of puberty.
compared to late childhood and later adolescence (see Moffitt et al., 2001). Additionally, longitudinal studies suggest that female offending may be more difficult to predict than male offending (Cauffman et al., in press; Odgers et al., 2005). During adulthood the sexes may again diverge, with males engaging in substantially more antisocial behavior. The degree of this difference is also difficult to detect because the sexes often end up in different placements—men more often enter the correctional system, whereas women are often referred to family court and/or mental health services (Cauffman, 2008; Chesney-Lind & Rodriguez, 1983).

To summarize, despite many clinicians’ and researchers’ assertions that adolescent female sex offenders constitute a highly unique group and/or present with more severe etiology than boys, one of the only consistent findings in the empirical literature is that girls have experienced high rates of sexual victimization. Nonetheless, Cauffman (2008) argues that even if the differences between male and female offenders are confined to the areas of victimization and prevalence of mental health problems, these differences can greatly influence the effectiveness of risk assessments and treatment programs. A study with a large, diverse sample size could provide support for this assertion or reveal that other variables may be more relevant to our knowledge of adolescent female sex offenders.

The Current Study

The purpose of this study is to help determine whether adolescent female sex offenders constitute a unique group in terms of exposure to psychosocial risk factors that literature suggests influence the development of sexual offending behavior. Using data from juvenile offenders in the state of Florida, a group of adolescent female sex offenders was compared to matched groups of adolescent male sex and non-sex
offenders and adolescent female non-sex offenders (referred to as “delinquents” for clarity).

This study used archival data from the Positive Achievement Change Tool (PACT; Florida Department of Juvenile Justice, 2005), designed to measure recidivism risk among juveniles who have been adjudicated delinquent in the state of Florida. This method is similar to that utilized in other studies of adolescent sex offending (e.g., Schwartz et al., 2006; Vandiver & Teske, 2006). This approach is required partly because large-scale data on sex offending behavior is not widely available; for example, national epidemiological studies of adolescent behavior, such as the National Longitudinal Study of Adolescent Health, ask about sexual behavior and delinquency as separate items, but do not assess whether a youth engages in sexual perpetration. Given that even adolescents who have been adjudicated for committing this behavior are often reluctant to admit their role in the offense (e.g., Barbaree & Marshall, 2006; Becker, 1988; Gannon, Beech, & Ward, 2008), it is unsurprising that large-scale efforts to obtain such information are not often pursued. Thus this approach, though not ideal because it only includes youth whose behavior was officially reported and prosecuted, is warranted.

One problem with most of the existing studies is that their small sample sizes make it difficult to generalize their results. The current study’s inclusion of many adjudicated juveniles in a large, diverse, heavily-populated state means that it not only includes a diverse sample of youth from a variety of racial, ethnic, socioeconomic, and geographic backgrounds, but also permits statistical analyses with sufficient power. Additionally, the current study will include other methods, as recommended by Vandiver.
and Walker (2002), to improve its external validity. For example, the clinical interviews in the Miccio-Fonseca (2000) study were all obtained by the same clinician, who was also the project’s researcher. Several other studies compared groups who had been assessed using different measures. The present study, on the other hand, uses data collected by numerous individuals across multiple locations in the state of Florida using a single measure and unlike most previous research, groups will be matched on the demographic variables of race/ethnicity and socioeconomic status.

Generally, this study follows experts’ recommendations to build on the currently limited knowledge base about female sex offenders (e.g., Barbaree & Marshall, 2006; Becker, 1998; Bumby & Bumby, 1997; Center for Sex Offender Management, 1999; Fehrenbach & Monastersky, 1988; Grayston & De Luca, 1999; Hunter et al., 1993; Schmidt & Pierce, 2004). More specifically, it follows the recommendation of Bumby and Bumby (1997) to attempt to determine whether adolescent female sex offenders constitute a unique group by comparing them to a matched group of adolescent male sex offenders and female and male juvenile delinquents.

**Implications**

A better understanding of what puts girls at risk for sex offending could help develop more comprehensive, empirically-based etiological models (Bumby & Bumby, 1997). Although sexual victimization appears to play a large role in the development of offending behavior, the fact that many more girls are victimized than end up becoming perpetrators indicates a multidimensional model may be best-suited to explain the onset and continuance of this behavior (Barbaree & Marshall, 2006; Finkelhor & Browne, 1985; Johnson, 1989).
A better understanding of which risk factors are gender-specific among this population could also improve the efficacy of juvenile delinquency management, correctional, and treatment programs (Foley, 2008). Hubbard and Pratt (2002) note that if research finds that the strongest predictors for offending are different for females than males, correctional programs should make adjustments to target gender-specific risk factors. Adolescent sex offender treatment programs can also be informed by a better knowledge of risk factors. Youth in juvenile justice settings have been shown to have higher rates of mental health problems than general adolescent samples (Atkins et al., 1999; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, 2002) and treatment is often a critical component of the referral process for adolescent sex offenders (Center for Sex Offender Management, 1999). Placing youth in the proper type and level of treatment is particularly important, given criminological literature suggests that high-intensity services delivered to low-risk to re-offend youth may actually serve to increase recidivism (Andrews & Bonta, 2003). Treatment programs specifically for adolescent female sex offenders are rare: For example, the state of Florida does not currently have a single specialized residential treatment program for sex offending girls, whereas there are 10 for boys (Florida Association for the Treatment of Sexual Abusers, 2009). Although this is partly an artifact of the relatively small number of girls needing these services, it should not preclude them from receiving specialized treatment if it is deemed beneficial. Given the promising treatment outcome studies for sex offending boys (e.g., Barbaree & Marshall, 2006; Becker, 1990; Center for Sex Offender Management, 1999), it is likely that girls could benefit from similar programs. If victimization and psychopathology are found to be particularly salient risk
factors for this population, they could be included in programs to help improve treatment efficacy. Lab, Shields, and Schondel (1993) argue that although treatment programs have been found to be effective for many sex offending youth, program growth has progressed without adequate knowledge as to what constitutes the best intervention for any one individual. In other words, even though research suggests that sex offender treatment is effective overall, this should not be taken to mean that existing programs cannot be improved upon.

A better understanding of risk factors can also aid in the improvement of risk assessment tools for use in clinical and legal settings. A large body of evidence suggests that clinicians’ so-called “clinical judgment” of violence risk is less accurate than structured and/or actuarial risk assessments (see Hilton, Harris, & Rice, 2006 for a review) and when consistently applied in the juvenile justice system, structured risk assessments can increase case management efficiency (Odgers et al., 2005). Although researchers have begun to develop risk assessment tools with male adolescents, virtually no studies have focused specifically on female adolescent offenders (Odgers et al., 2005; Schmidt & Pierce, 2004). Using risk assessment tools which have been validated using male samples could be particularly problematic considering clinicians tend to underestimate the risk of women’s future violence (Dutton, 2007; Lidz, Mulvey, Arnold, & Bennett, 1993). If research finds victimization to be a significantly more informative risk factor for girls than boys, risk assessments for girls could be developed to include assessment for posttraumatic symptomology, which is not a central component of existing risk assessments (Schmidt & Pierce, 2004). Early identification of high-risk youth and subsequent intervention may also be critical for prevention (Abel &
Rouleau, 1990; Becker et al, 1986): Considering criminal behavior of all types has been found to peak around 17 years of age, intervention efforts during adolescence could prevent many new offenses from occurring (Gottfredson & Hirschi, 1990).

Another goal of this study is to bridge the gap between criminological and psychological literature. For example, factors such as emotional distress, mental disorders, and sexual/physical victimization have been focused on extensively in the sex offender literature; however, criminological research on juvenile recidivism has demonstrated that these factors are of relatively low predictive validity compared with factors such as a history of antisocial behavior, antisocial peer associations, and substance abuse (Andrews & Bonta, 2003; Andrews, Bonta, & Wormith, 2006). The current study will not test recidivism per se, but it may help determine whether psychological factors such as victimization warrant the large role they have been given thus far in the female sex offender literature.

Finally, the present study results could have legal implications as well. Recent legislation has resulted in substantial legal and dispositional changes for adolescents convicted of sex crimes. Laws such as the federal Jacob Wetterling Act (1994; U. S. 42 § 14071) require the release of information about registered sex offenders in the interest of public safety. These laws have been criticized as being emotionally-driven responses to highly publicized, rare cases (see Zimring, 2004) rather than reflective of empirical research that indicates many adolescent sex offenders have low recidivism rates (Barbaree & Marshall, 2006; Becker & Hunter, 1997; Hanson & Morton-Bourgon, 2005; Zimring, 2004) and are responsive to treatment (Barbaree & Cortoni, 1993; Barbaree & Marshall, 2006; Becker, 1990; Center for Sex Offender Management, 1999). Such “one-
“Size fits-all” approaches have not been proven effective (Becker, 1998; Center for Sex Offender Management, 1999; Zimring, 2004) and research that highlights within-group differences among sex offenders could influence the development of more multidimensional policies, particularly in states which are taking evidence-based approaches to sex offender management.

**Primary Hypotheses**

To address the primary research question of whether adolescent female sex offenders constitute a unique group, the current study tests the following hypotheses:

1. Based on the findings of Bumby and Bumby (2005), Schwartz et al. (2006), and Vandiver and Teske (2006), compared with sex offending boys, sex offending girls are expected to:
   a) be significantly younger and have a younger age at first offense;
   b) report more substantial trauma history; and
   c) have witnessed more violence and report more histories of sexual abuse.
   d) However, based on research by Bumby and Bumby (1995) and Miccio-Fonseca (2000), no significant group differences are expected in terms of histories of suicidality.
   e) Because research findings are mixed in terms of gender differences in depression/anxiety (e.g., Bumby & Bumby, 1995; Miccio-Fonseca, 2000) no significant group differences are expected for depression/anxiety. However, research suggests girls have higher rates of trauma-related problems (see Bumby & Bumby 1997; Cauffman, 2004; Kubik et al., 2002) so I expect more girls will have been diagnosed with a mental disorder (this category includes PTSD).
2. Compared with delinquent girls, sex offending girls are expected to:
   a) report a more extensive history of sexual abuse;
   b) report a more extensive trauma history;
   c) have experienced more symptoms of depression/anxiety;
   d) report more extensive histories of suicidal ideation and attempts; and
   e) be more likely to have a diagnosed mental disorder.

3. Finally, the probability of being in the sex offender group will be different for boys and girls as a function of sexual victimization history and age at first offense, after controlling for the effects of the other predictors. The Gender x Age x Victimization interaction is expected to be significant. More specifically, I expect higher levels of sexual victimization and lower age at first offense among girls, but not boys (see Figure 2-1).

**Secondary Hypotheses**

In addition to the primary study hypotheses, I explore gender differences between sex- and non-sex offenders by testing the following secondary hypotheses:

4. As suggested by Cauffman (2008), girls in both groups will be more likely than boys to:
   a) have received a mental disorder diagnosis;
   b) report histories of sexual victimization;
   c) report higher levels of depression/anxiety; and
   d) report higher levels of trauma.

5. Based on the findings of Schwartz et al. (2006) and van Wijk et al. (2005), no significant gender differences are expected in reported experiences of physical abuse and neglect.
6. As suggested by Moffitt et al.’s (2001) research on the gender paradox, no significant gender differences in past and current alcohol and drug use are expected.
CHAPTER 3
METHODS

Participants

The current study used archival data from the Florida Department of Juvenile Justice (DJJ). The Florida DJJ is one of the largest juvenile justice agencies in the United States: in the 2006-2007 Fiscal Year, it processed 27,303 referrals for adolescent girls, comprising 30% of all referrals (Florida Department of Juvenile Justice, 2007). The sample of interest consisted of all girls age 13-17 referred to the DJJ for a “hands-on” felony sex offense between November 15, 2005 (when the PACT instrument was first implemented) and May 15, 2009. Only the first adjudicated offense was included. “Hands-on” offenses include child molestation, incest, rape, and sexual misconduct. A definition of each of these felonies according to Florida Statutes can be found in Appendix A. This procedure resulted in a sample of 145 girls.

Once the group of adolescent female sex offenders was obtained, three comparison groups of equal numbers of youth, also age 13 – 17 and referred to the DJJ during the same 3½ year time period, were established based on their committing offense. The first comparison group consisted of adolescent males referred for a “hands-on” felony sex offense; the second comparison group consisted of adolescent females referred for an “against-person” felony non-sex offense (defined in Appendix A); and the final comparison group consisted of adolescent males referred for an “against-person” felony non-sex offense. Youth in these groups were randomly selected from the total population of youth referred during that time period and were demographically similar to the population of felony offending youth referred during the timeframe of interest. To maintain participant anonymity, I did not have access to identifying
information beyond the basic demographic information necessary to select participants for one of the four groups.

**Measure**

**Positive Achievement Change Tool (PACT) Pre-Screen**

The PACT Pre-Screen is a 46-item instrument designed to measure a juvenile’s recidivism risk. It is administered to every youth in the state of Florida upon referral to the DJJ and is a semi-structured interview protocol designed to be completed in approximately 45 minutes. The PACT utilizes Motivational Interviewing techniques (Miller & Rollnick, 2002) to inform the development of a case plan specific to the youth’s identified needs including recommendation for probation supervision, outpatient/inpatient treatment, or confinement. A complete listing of all PACT Pre-Screen questions can be found in Appendix B.

The PACT was designed as a brief measure for routine administration within the first few days of admission to the juvenile justice system (e.g., at intake to probation or juvenile detention) as well as at intake in successive placements within the system. It was designed to rely primarily on youth self-report, be low-cost, and be usable with a wide range of adolescents (e.g., age, gender, education level, and race/ethnicity). The PACT is administered by individuals who have received specific training in risk management, case planning, and motivational interviewing techniques.

The PACT assesses four domains of the youth’s history: 1) Record of Referrals; 2) Social History; 3) Mental Health; and 4) Attitude/Behavior Indicators. For the purposes of testing this study’s hypotheses, only selected items from Domains 1, 2, and 3 were included.
Domain 1 assesses the youth’s prior criminal history and is pre-populated from the Juvenile Justice Information System database: unlike most of the other items in the instrument, items in this domain are not based on self-report. Domain 1 includes information on the age at which the youth first offended, seriousness of prior offenses in terms of number of prior felonies and prior misdemeanors, prior commitment placements, prior escapes, and offense type. The only item from Domain 1 included was item 1, the youth’s age at first offense. The possible responses for this item are 1) over age 16 at first referral; 2) 16 years of age; 3) 15 years of age; 4) 13 - 14 years of age; and 5) 12 years of age or under.

Domain 2 examines the juvenile’s social history and features gender, current school status and performance, past and current antisocial friends, family problems, past and present alcohol and drug use, history of physical and sexual abuse and neglect, and mental health diagnosis. All Domain 2 questions are self-reported items, with the exception of mental health diagnosis; only diagnoses that have been confirmed by a mental health professional are included. This “youth-centered,” self-report approach may be a more valid way of capturing rates of sensitive issues such as victimization (Belknap & Holsinger, 2006; Morrill, Yalda, Adelman, Musheno, & Bejarano, 2000).

Several items from Domain 2 were analyzed. To measure youths’ past and current alcohol and drug use, items 8a, 8b, 8c, and 8d were included. For each of these items, the individual administering the PACT can “check” multiple answers to the item

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2 Defined as “the age at the time of the offense for which the youth was referred to juvenile court for the first time on a non-traffic misdemeanor or felony that resulted in diversion, adjudication withheld, deferred prosecution or referral to adult court.”
indicating all that apply to the youth. Items 8a and 8b assess the youth’s history of alcohol and drug use, respectively. History of use includes any use by the youth in his/her lifetime. Possible responses for each of these items include: 1) no past use; 2) past use; 3) use disrupted education; 4) use caused family conflict; 5) use interfered with keeping pro-social friends; 6) use caused health problems; 7) use contributed to criminal behavior; 8) youth needed increasing amounts to achieve the same level of intoxication or high; and 9) youth experienced withdrawal problems. Items 8c and 8d assess the youth’s current alcohol and drug use, respectively. Current use refers to use in the last six months. Possible responses for each of these items include: 1) no current use; 2) current use; 3) use disrupts education; 4) use causes family conflict; 5) use interferes with keeping pro-social friends; 6) use causes health problems; 7) use contributes to criminal behavior; 8) youth needs increasing amounts to achieve the same level of intoxication or high; and 9) youth experiences withdrawal problems.

To assess youths’ history of victimization and witnessing violence, items 9a, 9b, and 9c will be included. For these items, suspected incidents of abuse are included, as are those disclosed by the youth (whether or not reported or substantiated officially) but reports of abuse and neglect investigated officially and proven to be false or lacking sufficient evidence are excluded. For each of these items, the individual administering the PACT can “check” multiple answers to the item indicating all that apply to the youth. Item 9a asks the youth whether s/he has been a victim of violence/physical abuse. Possible responses include 1) not having been a victim; 2) having been a victim at home; 3) having been a victim in a foster/group home; 4) having been victimized by a family member; 5) having been victimized by someone outside of the family, and 6)
having been attacked by a weapon. Item 9b asks the youth whether s/he has witnessed violence at home or in the community. Possible responses include: 1) has not witnessed violence; 2) has witnessed violence at home; 3) has witnessed violence in the community; and 4) family member killed as result of violence. Item 9c assesses whether the youth has been a victim of sexual abuse/rape. Possible responses include: 1) not a victim of sexual abuse/rape; 2) sexually abused/raped by a family member; 3) sexually abused/raped by someone outside the family.

Item 10 will be included to assess for neglect history. This item includes all incidents reported by youth with the exception of those investigated but were proven false or with insufficient evidence. Possible responses are either 1) not a victim or 2) a victim.

Youths’ history of mental health problems are assessed in item 11. Only mental health diagnoses confirmed by a mental health care professional are included. Conduct disorder, oppositional defiant disorder, substance abuse, and ADD/ADHD are excluded from this item because they are covered by other items in the PACT. Possible responses for item 11 are: 1) no history of mental health problem(s); 2) being diagnosed with mental health problem(s); 3) being diagnosed and only mental health medication is prescribed; 4) being diagnosed and only mental health treatment prescribed; and 5) being diagnosed and having mental health medication and treatment prescribed.

Domain 3 is an in-depth assessment of the youth’s mental health status including history of suicidal ideation, depression/anxiety, somatic complaints, thought disturbance, and traumatic experiences. Questions in this domain are based on the Massachusetts Youth Screening Instrument (MAYSI; Grisso & Barnum, 1998) which is
currently routinely utilized by approximately one-quarter of U. S. states to identify adolescents whose symptoms of psychological distress might require intervention as part of disposition and treatment planning. As a screening tool, the MAYSI was not intended for identification of clinical disorders defined by *DSM-IV-TR* (American Psychiatric Association, 2000) criteria. Rather, its objective is to briefly assess symptoms that are characteristic of disorders, as well as behaviors (e.g., suicide potential) that might require immediate intervention early on in their care and management. Grisso, Barnum, Fletcher, Cauffman, and Peuschold (2001) tested the reliability and validity of the MAYSI on a sample of 5083 male and female juvenile delinquents and reported the average internal consistency for the scales was $\alpha = 0.75$, and one-week test-retest reliabilities (0.74 for boys, 0.74 for girls) were found to parallel those of other similar assessments such as the Millon Adolescent Clinical Inventory (MACI; Millon & Davis, 1993) and the Child Behavior Checklist (Achenbach, 1991). In terms of convergent validity, scores on the MAYSI correlate moderately-high with those on the MACI (Archer, Stredny, Mason, & Arnau, 2004; Grisso et al., 2001).

Three items from Domain 3 will be included for analysis. Item 1 assesses a history of suicidal ideation and includes any previous thoughts, threats, plans and attempts even if the youth indicates they were manipulative or there was no intent. The individual administering the PACT can “check” multiple answers to the item indicating all that apply to the youth. Possible responses include: 1) has never has serious thoughts about suicide; 2) has had serious thoughts about suicide; 3) has made a plan to commit suicide; 4) has attempted to commit suicide; 5) feels life is not worth living/no hope for
future; 6) knows someone well who has committed suicide; and 7) engages in self-mutilating behavior.

Item 3 assesses the youth’s history of depression or anxiety. Possible responses include: 1) no history of depression/anxiety; 2) history of occasional feelings of depression/anxiety; 3) history of consistent feelings of depression/anxiety; 4) history of impairment in everyday tasks due to depression/anxiety. Item 6 asks about the youth’s trauma history. Responses include 1) no presence of traumatic event; 2) presence of traumatic event; and 3) flashbacks of traumatic event.

The PACT was heavily adapted from the Washington State Juvenile Court Assessment (WSJCA; Washington State Institute for Public Policy, 1999). The risk levels identified by the WSJCA have been shown to predict felony recidivism moderately well at 18-month follow-up (AUC = .64 for low, moderate, and high-risk offenders) and its factor structure has been supported (Barnoski, 2004; Washington State Institute for Public Policy, 1999).

The predictive validity of the PACT was supported by a dissertation by Baglivio (2008). Based on a sample of 48,871 youth (76% male, 24% female), he found that PACT scores significantly predicted re-offending at 12-month follow-up among youth in the community as well as youth who were discharged from residential treatment. He not only found that scores on the PACT predicted re-offending for males and for females equally well, but also failed to support the hypothesis (suggested by the “gender paradox”) that risk score criteria should be altered based on gender.
Variable Descriptions and Scoring

Offender age is a ratio-level variable ranging from 13 - 19 years old, representing the age at which the PACT assessment was administered to the youth. ³ Age at first offense (PACT Domain 1, item 1) is an ordinal-level variable whose responses are scored as: 1 = Over 16; 2 = 16; 3 = 15; 4 = 13 or 14; and 5 = 12 and under. Past and current alcohol and drug use problems (Domain 2, items 8a-8d) are dichotomous categorical variables whose responses are scored as 0 = does not report a history of use and problems and 1= reports a history of use and problems. History of violence/physical abuse (Domain 2, item 9a) is a dichotomous categorical variable whose responses are scored as 0 = does not report a history of violence/physical abuse and 1= reports a history of violence/physical abuse.

History of witnessing violence (Domain 2, item 9b) is a dichotomous categorical variable whose responses are scored as 0 = no history of witnessing violence and 1 = history of witnessing violence. History of sexual abuse/rape (Domain 2, item 9c) is a dichotomous categorical variable whose responses are scored as 0 = does not report history of sexual abuse/rape and 1 = reports history of sexual abuse/rape. History of being a victim of neglect (Domain 2, item 10) is a dichotomous categorical variable that are scored as 0 = not a victim of neglect and 1 = victim of neglect.

History of mental health problems (Domain 2, item 11) is a dichotomous categorical variable whose responses are scored as 0 = no history of mental health problem(s) and 1= diagnosed with mental health problem(s). History of suicidal ideation, attempts, and/or self-mutilating behavior (Domain 3, item 1) is an ordinal-level variable

³ All youth were younger than age 18 at the time of their offense; however, due to delays in judicial proceedings, 8 youth were 18 years or older at the time of PACT administration.
with scores ranging from 0 - 2. If the youth reports no history of suicidal ideation/self-harm, a score of 0 are given. If s/he reports a history of suicidal ideation with no behavioral attempts a score of 1 is given. For youths who report a history of suicidal ideation as well as self-harm behavior, a plan for a suicide attempt, and/or completed suicide attempts, a score of 2 is given. This scoring scheme is designed to distinguish youth with lower potential for suicide (ideation only) from those with higher potential (history of suicide attempts) and is similar to methods used in other interviewer-administered suicide measures (e.g., Beck et al., 1979).

History of depression/anxiety (Domain 3, item 3) is an ordinal-level variable whose scores range from 0 – 3. Responses will be scored as 0 = no history of depression/anxiety, 1 = history of occasional feelings of depression/anxiety, 2 = history of consistent feelings of depression/anxiety, and 3 = history of impairment in everyday tasks due to depression/anxiety. The constructs of depression and anxiety are grouped together in this item—a method similar to that used in other assessments of problem behaviors such as the Child Behavior Checklist (Achenbach, 1991). Some authors argue that grouping depression and anxiety symptoms together may be advantageous when assessing youth because it takes into account the considerable overlap among symptoms of “internalizing” disorders such as depression and anxiety (see Merrell, McClun, Kempf, & Lund, 2002). History of traumatic experience (Domain 3, item 6) is an ordinal-level variable whose scores range from 0 – 2. Responses are scored as 0 = no presence of traumatic event, 1 = presence of traumatic event, and 2 = flashbacks to traumatic event, which may be associated with PTSD (American Psychiatric Association, 2000).
Procedure

The DJJ maintains a comprehensive database called the Juvenile Justice Information System (JJIS). The database stores information on all youth entering the system and all services provided to those youth. From the JJIS database, the Office of Research and Planning performs monthly cumulative updates of various data elements on youth served and placement history. Part of these monthly extracts includes all PACT assessments administered. The monthly data extract for May 2009 was utilized for the current study. The extract contains all PACT assessments from the initial November 15, 2005 implementation date up to the date of the extract. The PACT extract contains the date each assessment was administered, as well as the overall risk score, criminal history risk score, social history risk score, answers to each PACT question, and gender. To obtain participants’ demographic data (gender, date of birth, and race/ethnicity), the PACT data were merged with another monthly data extract that captures the entire offense history for every youth who enters the juvenile justice system. Written permission was obtained from the DJJ Institutional Review Board to access these data files.
CHAPTER 4
RESULTS

Descriptive Statistics and Preliminary Analyses

Sample demographics are presented in Table 4-1. The racial/ethnic composition of participants was roughly representative of the overall population of youth referred to the Florida DJJ. In FY 2007 (N = 89,776), the Florida DJJ racial/ethnic distribution was 43.6% White, 39.8% Black, and 16.6% Other. Whites were comparatively overrepresented in the sex offender groups, whereas Blacks were overrepresented in the non-sex offender groups; this is consistent with previous research (e.g., Becker, 1998; Mathews et al., 1997; van Wijk et al., 2005). With the exception of sex offending girls, who were younger, participants’ ages were also representative of the overall population (70% of youth referred in FY 2007-2008 were age 15-17 at time of intake). Figures 4-1 and 4-2 illustrate trends in participants’ age at PACT assessment and age at first offense.

The type of offense for which each youth was referred is presented in Table 4-2. Among both boys and girls, the most common sex offense charge was Felony Sexual Battery; similarly, among non-sex offending youth, the most common charge was Battery. The central defining criterion for a Battery charge is direct contact with the victim; given the goal of this study was to focus on youth who were referred for “hands-on,” against-person violent offenses, this sample was appropriate for my research question (for a definition of each offense according to Florida statute, see Appendix A).

Analyses for this study were conducted using SPSS version 17.0. Because the data were not normally distributed and many variables were categorical, non-parametric tests were conducted.
Variable frequencies and descriptive statistics for ordinal-level variables are presented in Table 4-3. The narrative description of the findings of each hypothesis follows.

**Primary Hypotheses**

**Hypothesis 1: Sex Offending Girls Compared with Sex Offending Boys**

a) Consistent with hypotheses, girls were significantly younger than boys at the age of PACT administration, \( t(288) = -3.48, p < .001, d = -.41 \). The average girl was 14.70 years old, whereas the average boy was 15.45 years old, at this entry point into the DJJ. However, Mann-Whitney tests did not reveal significant gender differences in age of first offense \( (U = 9268.50, p > .05) \). This discrepancy may be due, in part, to the fact that many of the youth in this sample had prior offenses for which they had been referred to the DJJ. In other words, a youth could be 15 years old at the age of this PACT administration but have been 12 years old when committing the offense which resulted in his/her first DJJ referral. Another possible reason for this inconsistency could be the difference in the level of measurement of these variables: the measurement of the age at PACT administration was a ratio-level variable, whereas the measurement of the age at first offense was an ordinal-level variable.

b) As expected, the levels of trauma girls experienced were significantly higher than those experienced by sex offending boys \( (U = 8433.00, p < .001, r = -.24) \): nearly three times more girls than boys had experienced trauma (31.03% vs. 11.03%).
c) Over half (51.03%) of the girls in this sample had witnessed violence, compared with 34.48% of boys; as expected. This difference was significant, $\chi^2(1, N = 290) = 8.12, p < .05, \phi = .24$. More extreme gender differences were seen for rates of sexual abuse: only 8 sex offending boys in this sample (5.52%) reported having been sexually victimized compared with 41 sex offending girls (28.28%). As expected, this difference was significant ($\chi^2[1, N = 290] = 26.74, p < .001, \phi = .43$).

d) As expected, no significant gender differences were found in levels of suicidality ($U = 9678.00, p > .05$).

e) Significantly higher levels of depression/anxiety were reported among girls than boys ($U = 8096.50, p < .001, r = -.23$), which was contrary to the null hypothesis that there would be no gender differences for this variable. Finally, nearly twice as many girls than boys had received a mental health diagnosis prior to entering the DJJ; as expected, this difference was significant, $\chi^2(1, N = 290) = 8.70, p < .05, \phi = .25$.

**Hypothesis 2: Sex Offending Girls Compared with Delinquent Girls**

a) Consistent with hypotheses, sex offending girls were significantly more likely than delinquent girls to report having experienced sexual abuse ($\chi^2[1, N = 290] = 6.50, p < .05, \phi = .21$). In fact, nearly twice as many sex offending girls reported having been sexually abused (28.28% compared with 15.86%).

b) Consistent with hypotheses, sex offending girls reported higher levels of traumatic experiences than non-sex offending girls ($U = 9419.50, p < .05$), although the size of this effect was small ($r = -.12$).
c) Unexpectedly, no group differences were found in levels of depression/anxiety ($U = 10049.50, p > .05$).

d) There were no differences in suicidality between these groups ($U = 10334.00, p > .05$), thus the hypothesis that sex offending girls would have higher rates was not supported.

e) 26.90% of sex offending girls had received a mental disorder diagnosis prior to DJJ referral, compared with 15.17% of delinquent girls; as expected, this difference was significant ($\chi^2[1, N = 290] = 5.47, p < .05, \phi = .20$).

Hypothesis 3: Gender Differences in the Predicted Probability of Being a Sex Offender Based on Age and Sexual Victimization History

I expected that the probability of membership in the sex offender group would differ for boys and girls as a function of sexual victimization history and age at first offense, after controlling for the effects of the other predictors. The Gender x Age x Victimization interaction was expected to be significant. More specifically, I expected that higher levels of sexual victimization and lower age at first offense would be significantly associated with sexual offender status for girls, but not boys.

Binary logistic regression was used to determine whether the probability of being in the sex offender group (coded 0 = no sex offense and 1 = sex offense) differed as a function of the interaction between gender (coded 0 = female, 1 = male), sexual victimization history (coded 0 = no history and 1 = history), and age at first offense (coded 0 = 12 years old and under at first offense, 1 = 13-14 years old at first offense, 2 = 15 years old at first offense, 3 = 16 years old at first offense, 4 = over 16 years old at first offense). Logistic regression was selected for its ability to predict dichotomous
variables (Hosmer & Lemeshow, 2000; Peng, Lee, & Ingersoll, 2002). The block entry method was used. Sex offending status was the predicted dichotomous variable. According to Field (2007), there should not be multicollinearity among the variables to be included in the binomial logistic regression model; indeed, the point-biserial correlation coefficients between the sexual assault and age at first offense variables (girls: $r_{pb} = -.13$; boys: $r_{pb} = -.09$) did not suggest multicollinearity.

I first conducted binomial logistic regression to determine whether sexual abuse and age at first offense predicted sex offender group membership. I then examined whether the interactions of these variables added predictive value to the model while controlling for the effects of the other predictors. For each step of the model that relates to the hypothesis, I provide the overall model test statistic ($\chi^2$ for the first block in the model and $\Delta \chi^2$ for subsequent blocks to indicate change in model fit); Nagelkerke’s $R^2$, which can range from 0, indicating poor predictive value, to 1, indicating excellent predictive value; and the Odds Ratio (OR), including the 95% Confidence Interval (CI) around this value, which describes the odds of membership in the sex offender group for that block of the model (values > 1 indicate greater odds of membership and values < 1 indicate lower odds; if the 95% CI includes 1, the OR is not significant).

With the three predictors in the model, the overall model test statistic was significant, $\chi^2 (3, N = 580) = 9.86, p < .05$, Nagelkerke $R^2 = .02$, OR = 1.92 (95% CI = 1.21 – 3.04). Next, the two-way interaction terms were added, resulting in a significantly better model fit, $\Delta \chi^2 (3, N = 580) = 8.01, p < .05$, Nagelkerke $R^2 = .04$, OR = 1.86 (95% CI = 1.27 – 2.73); however, none of these interactions were significant. Finally, the Gender x Age x Victimization interaction was added; however, this did not significantly
improve the model fit, $\Delta \chi^2 (3, N = 580) = 7.06, p < .05$, Nagelkerke $R^2 = .06$, OR = 1.91 (95% CI = 1.29 – 2.81). As might be expected, the final model did a better job of predicting non-sex offenders (specificity [true negatives] = 78.6%) than sex offenders (sensitivity [true positives] = 34.1%). Results of these analyses are displayed in Table 4-4.

**Additional Analyses**

Because the proportion of boys who reported having been sexually victimized was significantly lower than girls, resulting in certain age cells not being represented (only 10 boys in the sample reported having been victimized), additional binomial logistic regression analyses were conducted using the larger sample of sex and non-sex offending boys ($N = 7334$) from which the subsamples of $N = 145$ were originally drawn. Results are presented in Table 4-7. As would be expected due to the excessive power resulting from the large sample size, the model test statistic was significant with the sexual abuse and age at first offense variables as predictors, $\chi^2 (2, N = 7334) = 166.00, p < .001$, Nagelkerke $R^2 = .03$, OR = 1.46 (95% CI = 1.31 – 1.63). The addition of the Age at first offense x Sexual abuse interaction term did not significantly improve the model fit and did not correctly identify any additional cases, $\Delta \chi^2 (1, N = 7334) = .21, p > .05$, Nagelkerke $R^2 = .03$, OR = 1.46 (95% CI = 1.31 – 1.63). In other words, even among a much larger sample of boys, the Age x Victimization interaction was still not significant. The predicted probabilities for the model among girls ($N = 290$) and the larger sample of boys ($N = 7334$) were plotted in Figures 4-3 and 4-4. Consistent with hypotheses, it can be seen that among girls, the model was most accurate (nearly 80%) in predicting membership in the sex offender group when the girl had a younger age at
first offense and had been sexually abused. The sensitivity of the model then decreases and for girls whose first offense was around age 16, the model’s ability to correctly identify sex offenders drops sharply, to around 30%. For girls who were not sexually abused, the model predicted group membership around chance rates across all ages (50%). Among boys, on the other hand, the model’s ability to correctly classify sex offenders based on sexual victimization remains consistently high (80 - 90%) across all ages at first offense. For boys who were not sexually abused (the vast majority of the sample; \( N = 7006 \)), the model’s sensitivity is on par with chance. Interestingly, the model’s sensitivity increases with age among both abused and non-abused boys—a pattern opposite that seen among girls.

**Secondary Hypotheses:**

**Sex Offending and Delinquent Girls Compared with Sex Offending and Delinquent Boys**

**Hypothesis 4**

a) Consistent with hypotheses, girls were more likely to have received a mental health diagnosis than boys (\( \chi^2 [1, N = 580] = 16.34, p < .001, \phi = .34 \)).

b) As expected, girls were significantly more likely than boys to report a history of sexual abuse (\( \chi^2 [1, N = 580] = 45.17, p < .001, \phi = .56 \)). Out of 580 total youth, 67 girls (23.10%) reported having been sexually victimized, compared with only 10 boys (3.45%).

c) Girls reported significantly higher levels of depression/anxiety (\( U = 31065.00, p <.001, r = -.20 \)), which was consistent with hypotheses.
d) Over twice as many girls than boys had experienced trauma (25.52% compared with 10.34%), and as expected, this difference was significant ($U = 35613.00, p < .001, r = -.27$).

Hypotheses 5 and 6

Contrary to hypotheses, both sex-and non-sex offending girls were significantly more likely to have experienced neglect ($\chi^2[1, N = 580] = 19.47, p < .001, \phi = .37$). 13.10% of girls had been neglected compared with 3.10% of boys. In terms of physical abuse, 24.48% of girls had been physically abused compared with 8.28% of boys, which was also significant ($\chi^2[1, N = 580] = 27.81, p < .001, \phi = .44$). Finally, as expected, no gender differences were found in past alcohol use ($\chi^2[1] = .99, p = .32$), past drug use ($\chi^2[1, N = 580] = 1.34, p > .05$), current alcohol use ($\chi^2[1] = .02, p = .90$), and current drug use ($\chi^2[1, N = 580] = 2.93, p > .05$).

Post-Hoc Analyses

Several other exploratory questions were examined in addition to the initial study aims. Because research suggests that prior victimization places a child at higher risk for additional victimization (Duncan, 1999; Finkelhor et al., 2007), I explored the rates of multiple types of victimization among youth in this sample. Following procedures described by Finkelhor et al. (2007), I compared the rates of “poly-victimization” based on five variables: witnessing violence, physical abuse, sexual abuse, neglect, and trauma. Poly-victimization scores could range from 0 (no types of victimization) to 5 (all types of victimization). Results are presented in Figure 4-5 and Table 4-8. I then conducted a one-way analysis of variance to determine whether there were group differences between in the average number of types of victimization. Because Levene’s statistic was significant ($p < .001$), the Welch correction was used. There was a
significant main effect for sex offender status, $F (5, 75.36) = 2.66, p < .05$, as well as gender, $F (5, 79.62) = 16.22, p < .001$. Post hoc analyses using the Games-Howell procedure revealed that indeed, girls experienced significantly more types of victimization, on average, than boys.

**General Results Summary**

A summary of results in relation to the study’s hypotheses is presented in Table 4-9. Generally, the primary hypotheses of this study were supported such that sex offending girls had experienced significantly more trauma, victimization, and mental problems than both sex offending boys and delinquent girls. Surprisingly, however, sex offending and delinquent girls reported similar levels of depression/anxiety and suicidality. The secondary hypotheses of this study were generally supported in that girls reported more negative experiences and internalizing symptoms than boys. Significantly more girls than boys had been physically abused and neglected, which was an unexpected finding.
Table 4-1. Sample demographics

<table>
<thead>
<tr>
<th></th>
<th>Sex Offending Girls</th>
<th>Delinquent Girls</th>
<th>Sex Offending Boys</th>
<th>Delinquent Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
</tr>
<tr>
<td>Asian</td>
<td>N = 1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>.7%</td>
<td>0%</td>
<td>.7%</td>
<td>0%</td>
</tr>
<tr>
<td>Black</td>
<td>N = 54</td>
<td>87</td>
<td>55</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>60%</td>
<td>37.9%</td>
<td>60%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>N = 13</td>
<td>14</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>9%</td>
<td>9.7%</td>
<td>14.5%</td>
<td>11%</td>
</tr>
<tr>
<td>Haitian</td>
<td>N = 0</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>2.8%</td>
<td>2.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Jamaican</td>
<td>N = 1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>.7%</td>
<td>0%</td>
<td>.7%</td>
<td>0%</td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>N = 77</td>
<td>40</td>
<td>63</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>53%</td>
<td>28%</td>
<td>43.4%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Age at assessment</td>
<td>Range 8.5 – 18.24</td>
<td>9.77 – 18.50</td>
<td>10.27 – 18.98</td>
<td>10.4 – 17.94</td>
</tr>
<tr>
<td></td>
<td>M = 14.70**</td>
<td>15.46</td>
<td>15.47</td>
<td>15.49</td>
</tr>
<tr>
<td></td>
<td>SD = 1.93</td>
<td>1.65</td>
<td>1.84</td>
<td>1.72</td>
</tr>
</tbody>
</table>

**p < .001.
Table 4-2. Frequencies of offense type for each group

<table>
<thead>
<tr>
<th>Sex OffendingGirls</th>
<th>DelinquentGirls</th>
<th>Sex OffendingBoys</th>
<th>DelinquentBoys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felony sexual battery</td>
<td>$N = 56$</td>
<td>53</td>
<td>38.6%</td>
</tr>
<tr>
<td>Lewd/lascivious battery</td>
<td>$N = 29$</td>
<td>27</td>
<td>20%</td>
</tr>
<tr>
<td>Lewd/lascivious molestation</td>
<td>$N = 38$</td>
<td>52</td>
<td>26.2%</td>
</tr>
<tr>
<td>Lewd/lascivious conduct</td>
<td>$N = 22$</td>
<td>13</td>
<td>15.2%</td>
</tr>
<tr>
<td>Aggravated assault</td>
<td>$N = N/A$</td>
<td>36</td>
<td>24.8%</td>
</tr>
<tr>
<td>Aggravated battery</td>
<td>$N = N/A$</td>
<td>38</td>
<td>26.2%</td>
</tr>
<tr>
<td>Felony battery</td>
<td>$N = N/A$</td>
<td>63</td>
<td>43.4%</td>
</tr>
<tr>
<td>Murder and non-negligent manslaughter</td>
<td>$N = N/A$</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>$N = N/A$</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Robbery</td>
<td>$N = N/A$</td>
<td>5</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

4 A large number of different types of offenses were represented in the sample. For ease of presentation, the offenses were collapsed into broad categories. For example, Aggravated Assault included charges With and Without the Use of a Deadly Weapon.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex Offending Girls</th>
<th>Delinquent Girls</th>
<th>Sex Offending Boys</th>
<th>Delinquent Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
</tr>
<tr>
<td>Age at first offense</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 and under</td>
<td>47</td>
<td>34</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td>13 – 14</td>
<td>57</td>
<td>58</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>26</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>16</td>
<td>19</td>
<td>15</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Over 16</td>
<td>7</td>
<td>12</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>History of alcohol use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>118</td>
<td>102</td>
<td>117</td>
<td>113</td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>43</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>History of drug use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>114</td>
<td>111</td>
<td>115</td>
<td>98</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>31</td>
<td>34</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>Current alcohol use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>127</td>
<td>129</td>
<td>131</td>
<td>124</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>18</td>
<td>16</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Current drug use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>125</td>
<td>127</td>
<td>128</td>
<td>109</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>20</td>
<td>18</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>Physical abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>105</td>
<td>114</td>
<td>130</td>
<td>136</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>40</td>
<td>31</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Witnessed violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>71</td>
<td>62</td>
<td>95</td>
<td>77</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>74</td>
<td>83</td>
<td>50</td>
<td>68</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>104</td>
<td>122</td>
<td>137</td>
<td>143</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>41</td>
<td>23</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Neglect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>121</td>
<td>131</td>
<td>140</td>
<td>141</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>24</td>
<td>14</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Mental health problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>101</td>
<td>114</td>
<td>121</td>
<td>133</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>39</td>
<td>22</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Suicidality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (0)</td>
<td>114</td>
<td>116</td>
<td>125</td>
<td>139</td>
</tr>
<tr>
<td>Thoughts but no plan/attempt (1)</td>
<td>18</td>
<td>19</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Has made a plan/attempt (2)</td>
<td>13</td>
<td>10</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

5 Totals in some columns may not add up to 145 due to missing data.
Table 4-3. Continued.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex Offending Girls</th>
<th>Delinquent Girls</th>
<th>Sex Offending Boys</th>
<th>Delinquent Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
<td>N = 145</td>
</tr>
<tr>
<td>History of depression/anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None (0)</td>
<td>75</td>
<td>82</td>
<td>109</td>
<td>120</td>
</tr>
<tr>
<td>Occasional feelings (1)</td>
<td>48</td>
<td>42</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Consistent feelings (2)</td>
<td>17</td>
<td>16</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Impairment (3)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Trauma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No history (0)</td>
<td>100</td>
<td>116</td>
<td>129</td>
<td>131</td>
</tr>
<tr>
<td>History of event(s) (1)</td>
<td>31</td>
<td>17</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Flashbacks to event(s) (2)</td>
<td>14</td>
<td>12</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 4-1. Age at assessment.
Figure 4-2. Age at first offense.\textsuperscript{6}

\textsuperscript{6} Age at which youth committed the first offense for which s/he was referred to the DJJ.
Table 4-4. Logistic regression predicting membership in sex offender group for girls and boys  
(N = 290 girls and 290 boys)

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>Wald</th>
<th>$Exp(B)$</th>
<th>95% C.I. for $Exp(B)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.13</td>
<td>.27</td>
<td>.25</td>
<td>.88</td>
<td>.52 - 1.48</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.34</td>
<td>.45</td>
<td>8.85*</td>
<td>3.83</td>
<td>1.58 - 9.28</td>
</tr>
<tr>
<td>Age</td>
<td>-.04</td>
<td>.12</td>
<td>.14</td>
<td>.96</td>
<td>.76 - 1.20</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>.18</td>
<td>.15</td>
<td>1.53</td>
<td>1.20</td>
<td>.90 - 1.61</td>
</tr>
<tr>
<td>Gender * Sexual Abuse</td>
<td>-1.80</td>
<td>1.32</td>
<td>1.87</td>
<td>.17</td>
<td>.01 - 2.19</td>
</tr>
<tr>
<td>Age * Sexual Abuse</td>
<td>-.46</td>
<td>.25</td>
<td>3.47</td>
<td>.63</td>
<td>.39 - 1.02</td>
</tr>
<tr>
<td>Age * Gender * Sexual Abuse</td>
<td>21.75</td>
<td>12977.21</td>
<td>.000</td>
<td>2.78E9</td>
<td>.00</td>
</tr>
<tr>
<td>Constant</td>
<td>-.10</td>
<td>.20</td>
<td>.26</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

Note: Model $\chi^2 (7, N = 580) = 24.94, p = .001, -2 \text{ log likelihood} = 779.11$.  
*p < .05.

Table 4-5. Logistic regression predicting membership in sex offender group for girls (N = 290)

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>Wald</th>
<th>$Exp(B)$</th>
<th>95% C.I. for $Exp(B)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>1.34</td>
<td>.45</td>
<td>8.85*</td>
<td>3.83</td>
<td>1.58 - 9.28</td>
</tr>
<tr>
<td>Age</td>
<td>-.04</td>
<td>.12</td>
<td>.14</td>
<td>.96</td>
<td>.76 - 1.20</td>
</tr>
<tr>
<td>Age * Sexual Abuse</td>
<td>-.46</td>
<td>.25</td>
<td>3.47</td>
<td>.63</td>
<td>.39 - 1.02</td>
</tr>
<tr>
<td>Constant</td>
<td>-.10</td>
<td>.20</td>
<td>.26</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

Note: Model $\chi^2 (3, N = 290) = 12.44, p < .05, -2 \text{ log likelihood} = 389.59$.  
*p < .05.
### Table 4-6. Logistic regression predicting membership in sex offender group for boys (N = 290)

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>B</th>
<th>SE B</th>
<th>Wald</th>
<th>Exp(B)</th>
<th>95% C.I. for Exp(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>-.46</td>
<td>1.24</td>
<td>.14</td>
<td>.63</td>
<td>.06</td>
<td>7.12</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.14</td>
<td>.09</td>
<td>2.31</td>
<td>1.15</td>
<td>.96</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>Age * Sexual Abuse</td>
<td>21.29</td>
<td>12977.21</td>
<td>.00</td>
<td>1.76E9</td>
<td>.00</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.24</td>
<td>.18</td>
<td>1.83</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Model $\chi^2 (3, N = 290) = 12.50, p < .05, -2 \text{ log likelihood} = 389.52.$

### Table 4-7. Logistic regression predicting membership in sex offender group for boys (N = 7334)

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>B</th>
<th>SE B</th>
<th>Wald</th>
<th>Exp(B)</th>
<th>95% C.I. for Exp(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual abuse</td>
<td>1.53</td>
<td>.19</td>
<td>64.60**</td>
<td>4.61</td>
<td>3.18</td>
<td>6.70</td>
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<tr>
<td>Age</td>
<td>.08</td>
<td>.02</td>
<td>16.36**</td>
<td>1.08</td>
<td>1.04</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>Age * Sexual Abuse</td>
<td>.06</td>
<td>.14</td>
<td>.20</td>
<td>1.07</td>
<td>.81</td>
<td>1.41</td>
<td></td>
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<tr>
<td>Constant</td>
<td>-.16</td>
<td>.03</td>
<td>21.48**</td>
<td>.85</td>
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</table>

Note: Model $\chi^2 (3, N = 7334) = 166.20, p < .001, -2 \text{ log likelihood} = 10000.88.$ **$p < .001.$
Figure 4-3. Interactive effect of age at first offense and sexual victimization history on sex offending among girls.

Note. N = 290.
Figure 4-4. Effect of age at first offense and sexual victimization history on sex offending among boys.
Figure 4-5. Poly-victimization across groups.

Table 4-8. Frequencies and descriptive statistics of poly-victimization

<table>
<thead>
<tr>
<th>Number of Types of Victimization</th>
<th>Sex Offending Girls</th>
<th>Delinquent Girls</th>
<th>Sex Offending Boys</th>
<th>Delinquent Boys</th>
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<tr>
<td></td>
<td>N = 145</td>
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<td>0</td>
<td>49</td>
<td>51</td>
<td>88</td>
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<td>1</td>
<td>34</td>
<td>50</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>17</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>15</td>
<td>8</td>
<td>12</td>
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<tr>
<td>4</td>
<td>8</td>
<td>9</td>
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</tr>
<tr>
<td>5</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>1</td>
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</table>

\[ M \]
\[ 1.54 \quad 1.24 \quad .65 \quad .67 \]

\[ SD \]
\[ 1.54 \quad 1.31 \quad 1.01 \quad .82 \]

*p < .05; **p < .001.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>$t$</th>
<th>$U$</th>
<th>$\chi^2$</th>
<th>Hypothesis supported?</th>
<th>Effect size $^7$</th>
<th>Estimate of effect magnitude $^8$</th>
</tr>
</thead>
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<tr>
<td>Sex offending girls vs. boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls younger at PACT assessment</td>
<td>-3.48**</td>
<td></td>
<td></td>
<td>Yes</td>
<td>-.20</td>
<td>Small</td>
</tr>
<tr>
<td>Girls younger at first offense</td>
<td>9268.50</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls more trauma</td>
<td>8433.00**</td>
<td>Yes</td>
<td></td>
<td></td>
<td>-.24</td>
<td>Small</td>
</tr>
<tr>
<td>Girls witnessed more violence</td>
<td>8.12*</td>
<td>Yes</td>
<td></td>
<td></td>
<td>.24</td>
<td>Small</td>
</tr>
<tr>
<td>Girls more sexual abuse</td>
<td>26.74**</td>
<td>Yes</td>
<td></td>
<td></td>
<td>.43</td>
<td>Medium-Large</td>
</tr>
<tr>
<td>No differences in suicidality</td>
<td>9678.00</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No differences in depression/anxiety</td>
<td>8096.50**</td>
<td>No</td>
<td></td>
<td></td>
<td>-.23</td>
<td>Small</td>
</tr>
<tr>
<td>Girls more mental disorder</td>
<td>8.70*</td>
<td>Yes</td>
<td></td>
<td></td>
<td>.25</td>
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</tr>
<tr>
<td>Sex offending girls vs. delinquent girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Sex offending girls more:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>sexual abuse</td>
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<td></td>
<td></td>
<td>.21</td>
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<tr>
<td>severe trauma</td>
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<tr>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>suicidality</td>
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<td></td>
<td></td>
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<tr>
<td>mental disorder diagnosis</td>
<td>5.47*</td>
<td>Yes</td>
<td></td>
<td></td>
<td>.20</td>
<td>Small</td>
</tr>
<tr>
<td>Both groups of girls vs. boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls more:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mental disorder diagnosis</td>
<td>16.34**</td>
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<td></td>
<td></td>
<td>.34</td>
<td>Medium</td>
</tr>
<tr>
<td>sexual abuse</td>
<td>45.17**</td>
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<td></td>
<td></td>
<td>.56</td>
<td>Large</td>
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<tr>
<td>depression/anxiety</td>
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<td></td>
<td></td>
<td>-.20</td>
<td>Small</td>
</tr>
<tr>
<td>trauma</td>
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<td></td>
<td></td>
<td>-.27</td>
<td>Small</td>
</tr>
<tr>
<td>Both groups of girls vs. boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>No differences:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neglect</td>
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<td></td>
<td></td>
<td>.37</td>
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<tr>
<td>physical abuse</td>
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<td>Both groups of girls vs. boys</td>
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</tr>
<tr>
<td>No differences:</td>
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<td></td>
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<td>past alcohol use</td>
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<tr>
<td>past drug use</td>
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<td></td>
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<tr>
<td>current alcohol use</td>
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<tr>
<td>current drug use</td>
<td>2.93</td>
<td>Yes</td>
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</tr>
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</table>

$^*$p < .05; **p < .001.

$^7$ To facilitate comparisons, effect sizes have been converted to $r$ equivalents.

$^8$ Based on recommendations by Cohen (1992).
CHAPTER 5
DISCUSSION

Generally, the findings of this study are consistent with previous research suggesting that although many youth referred to the DJJ for violent crimes have endured a variety of negative life experiences, these rates tend to be higher among girls than boys. However, some results were surprising and challenge some of the assumptions of previous literature. In this chapter, I begin by addressing my central research question: whether adolescent female sex offenders constitute a unique group in terms of age, mental health problems, victimization, and trauma exposure. A brief discussion of the theoretical implications of these findings is integrated into this section. Next, I discuss the unexpected findings of this study in terms of exposure to violence, physical abuse and neglect, poly-victimization, and risk factors that were not assessed in this study. In the section that follows, I address my findings in light of the so-called “gender paradox.” I then describe this study's implications for the assessment of, and mental health treatment for, girls entering the juvenile justice system. Finally, I conclude with a discussion of this study’s limitations and recommendations for future research.

Adolescent Female Sex Offenders

The sex offending girls in this study are a heterogeneous group whose backgrounds range from those without a trauma history and few psychological troubles, to those who have experienced multiple forms of victimization, trauma, and other mental health problems. The post-hoc analyses in my study reveal that whereas 43% of the sex offending girls had been victimized in more than one domain, approximately one third of reported no history of witnessing violence, physical abuse, sexual abuse, neglect, or trauma. Given this variability in histories, the etiology of sex offending behavior is
difficult to determine, particularly for those youth who did not experience victimization and do not appear to be struggling with mental health symptoms. The findings can be better understood by considering that although all the girls in my study were found guilty of committing a sex offense, there may be significant variability in their offending histories as well as their life experiences. I did not have access to full case files so it is unclear how many of these girls have multiple victims compared with those girls for whom the index offense represents their only sex offending behavior. Literature on sex offending boys suggests that for some, sex offending behavior is a somewhat isolated, experimental act of sexual curiosity, whereas for others, it is part of a pattern of sexually deviant behavior (see Abel & Rouleau, 1990; Barbaree & Marshall, 2006; Becker, 1988; Hunter et al., 2006). Whether sex offending behavior represents experimentation versus a pattern may be a critical developmental distinction with typological implications. In a study of 67 girls in sex offender treatment programs, Mathews et al. (1997) found that a small subgroup reported little family dysfunction and past maltreatment, and their offending behaviors may have been limited to isolated incidents. Another group, comprising approximately one third of their sample, had engaged in more extensive offending behavior and reported mild to moderate levels of psychopathology and victimization history. Finally, one half of the sample had experienced significant trauma from a young age and reported significant psychological disturbance and difficulty forming attachments. These girls often had a history of suicidality and had engaged in other delinquent behaviors. Mathews et al. (1997) argued that this final group presumably presents the greatest risk to re-offend. Based on these findings, Mathews et
al. (1997) concluded that sex offending girls are a heterogeneous group and a typological theory may help explain the diverse experiences of these youth.

**Age.**

Consistent with the girls in Vandiver and Teske’s (2006) study, the sex offending girls in the current study were significantly younger than the sex offending boys; however, no significant differences were found in the age of first offense. This finding was surprising because gender differences in age of onset of offending may be most pronounced for serious, aggressive types of delinquency (see Moffitt et al., 2001). In addition to the differences in the level of measurement of these variables (ratio versus ordinal), there are several other possible reasons for this discrepancy. One is that the behaviors committed by adolescents are similar and start at earlier ages, but society views girls’ antisocial behaviors differently and thus girls are referred for their offenses sooner than boys. This would mean that the girls in this sample were more likely referred for their first offense, whereas boys may have previously offended but were not referred until they had repeated the behavior. Similarly, another possible explanation, as suggested by Chesney-Lind and Shelden (1998), is that violent offenses committed by girls are punished more severely by the justice system and more likely to receive a harsher sentence.

Considering the dramatic developmental changes that occur during adolescence (see Goossens & Jackson, 2006) and that many paraphilias develop during puberty (Hunter & Becker, 1994; Hunter, Goodwin, & Becker, 1994), it may be important to determine whether girls actually begin offending earlier than boys, or whether it simply appears so based on legal dispositions. A gender difference in onset of offending could have ramifications for the prediction of future sex offending behavior, as has been found
in some studies of juvenile delinquency. For example, in their six-year longitudinal study of 270 Dutch youth aged 12-14, Landsheer and van Dijkum (2005) found that although the level of boys’ delinquent activity in late adolescence strongly depended on earlier delinquent activities, girls’ delinquency was not predicted by antisocial behavior during pre- and early adolescence. These findings appear to affirm the conclusions made by Goldwebber et al. (2009) that although ongoing offending behavior characterizes male offending and predicts future offending, girls’ antisocial behavior may be the result of different and less covertly criminal behavioral precursors. In other words, girls’ delinquency appears to be more difficult to predict than boys’ delinquency. It remains unclear whether findings such as these apply to adolescent sex offenders and whether judicial dispositions that include harsher sentencing for girls serve as a response to the seemingly unpredictable nature of girls’ offending behavior.

**Depression/Anxiety, Suicidality, and Mental Health Diagnosis**

As expected, nearly half of the sex offending girls in this sample reported feelings of depression/anxiety and 21% reported past or current suicidality, suggesting the need for mental health services among this population. These rates are similar to other studies of female adolescent sex offenders with comparable samples. For example, Mathews et al. (1997) found that over one half of the sex offending girls in their sample had a history of mood disturbance and one fourth had experienced suicidal ideation and/or attempts. Although the rates among the girls in Bumby and Bumby’s (1993, 1995) studies were higher (83% had a history of depression and 58% had made a prior suicide attempt), this is probably because these samples were drawn from residential treatment centers.
There are many possible reasons for the high rates of mood disturbance and self-harm among these girls. An internalized response to relational problems often results from negative life experiences such as caregiver instability and domestic violence, particularly in the absence of adequate support and healthy forms of coping (Zoccolillo & Rogers, 1991). Generally, girls appear at a particularly high risk for developing mood disorders (Gover, 2004). For example, Fletcher (2008) analyzed longitudinal Add Health data and found that the link between childhood mistreatment and depression is strongest for females, even among brothers and sisters within families. Fletcher (2008) also suggested that the effects of child mistreatment on depression may increase with age. Thus, there may be a particularly pressing need for early detection and intervention for depression among delinquent girls.

Girls’ victimization experiences may have contributed to their symptoms of depression. Adolescents who have been victimized may, in the absence of other coping methods, internalize the experience and develop a poor self-concept as part of this response (Cauffman, 2008; Gover, 2004). Additionally, mood and anxiety symptoms are often comorbid with PTSD (see Hien et al., 2009) and whereas the PACT instrument utilized in the current study does not specifically assess traumatic stress-related symptoms, nearly half the girls in the Mathews et al. (1997) sample met the diagnostic criteria for PTSD. The rates of suicidality in the current study are not surprising, given that self-injury is highly correlated with histories of abuse (Herman, 1992). Hunter et al. (2006) note that “chronic dysphoria and unresolved trauma experiences may serve as stimuli for both self-injurious behavior and aggressive and sexual acting out” (p. 154).
Difficulty with mood regulation and impulse control may combine to result in violent behavior against others, particularly among girls who have been abused.

Despite the relatively high rates of symptomology in my study, three fourths of sex offending girls had not received a mental health diagnosis prior to adjudication; this proportion is lower than in studies based on clinical samples (e.g., Bumby & Bumby, 1997; Hunter et al., 1993; Lewis & Stanley, 2000; Mathews et al., 1997). There are several reasons why many girls who could have benefited from mental health treatment had not received it prior to entering the system. One is that for first-time offenders, others around them may not have been aware of the severity of their problems until after their offenses occurred. Many delinquent youth who need mental health treatment come from poorly supervised chaotic households (Bumby & Bumby, 1997; Hunter et al., 1993; Hunter et al., 2006); thus for many youth, entry into the juvenile justice system serves as a critical juncture at which they can be referred to much-needed mental health services for the first time (Center for Sex Offender Management, 1999). Additionally, symptom development may worsen over time so that by the time they enter adolescence, girls’ symptoms may be fairly severe (Belknap & Holsinger, 2006). Some studies have found that despite their high prevalence of mental health problems, conduct-disordered girls use mental health services less frequently than conduct-disordered boys (Offord et al., 1987). One goal of instruments such as the PACT is to assess the need for mental health services among delinquent youth to more quickly refer youth to the appropriate treatment based on their needs. Furthermore, as Pajer (1998) discovered in her meta-analysis, the psychiatric problems of antisocial girls often
continue into adulthood, underscoring the need for intervention and treatment during adolescence.

It is also possible that some sex offending girls do not present with symptoms that would result in a mental health referral. Vandiver and Kercher (2004) note that reliance on clinical samples gives the impression that female sex offenders suffer from serious psychological problems when this might not necessarily be the case. Indeed, the typology proposed by Mathews et al. (1997) includes a subgroup of offenders who are not severely psychologically disturbed, and the Center for Sex Offender Management (2007) recommends that although mental health treatment is likely helpful for many girls, it is important to consider the individual differences in the mental health needs of these youth.

Contrary to expectations, sex offending girls did not have higher rates of depression/anxiety and suicidality than delinquent girls. Instead, many girls in both groups had a history of “internalizing” problems, which are common among girls in the justice system (Cauffman, 2004, 2008). As expected, there were gender differences in rates of these problems, such that significantly more sex- and non-sex-offending girls than boys had a history of mood disturbance, self-harm and suicidality, and mental health diagnosis. These findings are consistent with other studies using similar instruments. Cauffman’s (2004) statewide screening of mental health problems among youthful offenders in Pennsylvania using the MAYSII-2 (Grisso et al., 2001) revealed that 54% of girls, compared with 36% of boys, met clinically significant cutoffs for depression and 33% of girls, compared with 18% of boys, exceeded the cutoff for suicidal ideation.
A large body of literature substantiates higher rates of depression and anxiety in incarcerated females than males (e.g., Gover, 2004; Herkov, Gynther, Thomas, & Myers, 1996). Studies of delinquent youth have consistently found that delinquent girls have higher rates of both internalizing and externalizing mental health problems than offending boys (Abram et al., 2004; Ariga et al., 2008; Atkins et al., 1999; Goldstein, Olubadewo, Redding, & Lexcen, 2005; Matsumoto et al., 2009; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002) and non-delinquent youth (Cauffman et al., 2007; Ryan & Redding, 2004). Costello et al. (2003) found that depression was comorbid with conduct disorder in girls but not boys and concluded that there is no evidence that boys with an emotional disorder were at increased risk of a behavioral disorder, or vice versa, whereas girls with anxiety disorders had increased risk for later substance use disorders.

It is important to bear in mind that gender differences in these problems are not specific to delinquent youth. A large body of research suggests that more girls experience depression and anxiety throughout adolescence than boys (Kilpatrick et al., 2003; Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993; Nolen-Hoeksema & Girgus, 1994; Rutter, 1986) and that girls attempt suicide more often (Rosenthal, 1981). However it does appear that these problems may be exacerbated among youth in the justice system, given they tend to have fewer coping resources and social supports than non-delinquent youth (Cauffman, Lexcen, Goldweber, Shulman, & Grisso, 2007; Hawkins, Graham, Williams, & Zahn, 2009; Hunter, 2004; Matsumoto et al., 2009).

An interesting consideration is whether adolescent offending is the result of mood disturbance, or whether these behaviors are more rooted in conduct disorder problems
which subsequently contribute to problems with mood. In their extensive series of longitudinal studies, Moffitt et al. (2001) examined the relationship between conduct disorder and depression and found although adolescent conduct problems predicted adult depression—and did so more strongly for women than men—depression worsened during the transition from adolescence to adulthood. These authors concluded that girls, more so than boys, responded internally to their adolescent antisocial behavior in a way that exacerbated symptoms of depression and anxiety. It may be that, because society views antisocial girls as more deviant than antisocial boys, girls who “act out” in violent ways are met with more criticism and rejection from others which contributes to their feelings of self-rejection (Moffitt et al., 2001). Future researchers may wish to continue to examine this question as it relates to prevention and treatment efforts.

Victimization and Trauma

As expected, many sex offending girls in this sample had been victimized, although the proportion is not as high as in clinically-based samples. The most common victimization experience was witnessing violence (51%), followed by sexual abuse (28%), physical abuse (27%), and neglect (17%). Thus, surprisingly, nearly identical numbers of sex offending girls had experienced sexual and physical abuse. These rates are similar to those found by Mathews et al. (1997), who found that 52% of the girls in their study had been sexually abused and 39% had been physically abused, and a meta-analysis of youth with sexual behavior problems by Burton and Schatz (2003) found that 38% of youth (from 30 studies) had been physically abused, 43% (from 49 studies) had been sexually abused, and 32% (from 10 studies) had been neglected. Thus whereas the youth in my sample represent those referred for the most serious
violent offenses, the rates at which they had experienced abuse are similar to other community-based samples of adolescent sex offenders.

For girls who have been victimized, there are several ways in which these experiences may contribute to the etiology of offending behaviors. Some victims may become offenders in an attempt to master the feelings of helplessness resulting from their own victimization (Hunter et al., 2006). Victimization often prevents the development of secure attachment formation (Briere & Elliott, 1993) and some girls may seek to connect with others sexually because they lack the awareness of, and/or skills to form healthy relationships (Finkelhor & Araji, 1986; Hunter et al., 2006). Victims may develop an “aggressive” behavioral pattern during childhood in which they exploit others and engages in sexual and aggressive acts (Hartman & Burgess, 1988). Childhood abuse may also have negative biological consequences that contribute to these behaviors: research suggests that central nervous system development may be compromised and self-regulation impaired as a result of child maltreatment (Ford, 2005). Self-regulation is a critical component of adolescent development and problems with self-regulation may prevent youth from controlling the impulse to act aggressively toward others (Ford, Chapman, Hawke, & Albert, 2007).

As expected, girls in both groups experienced significantly more trauma and were more likely to have received a diagnosed mental health disorder than boys. These results are consistent with other research suggesting that the prevalence rate of PTSD among incarcerated girls is higher than that among incarcerated boys as well as youth in the community (Cauffman et al., 1998; Cauffman et al., 2007). Although this study did not specifically assess the prevalence of PTSD-related symptomology among this
sample, one can infer that trauma-related mental health issues are relevant for a subset of these youth. This finding suggests that theoretical models such as the Information Processing of Trauma Model (IPTM; Burgess, Hartman, & McCormick, 1987) may be relevant for understanding the development of sex offending behaviors among girls who have been victimized. Research suggests that trauma involving victimization by others is more likely than other types of trauma to lead to impairment in psychosocial functioning and physical health (Hien et al., 2009; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). It is possible that some of the adolescents in this study have responded to the traumatic events in their lives by engaging in internal self-destructive behavior in addition to external aggressive behavior (Widom, 1989).

This being said, although trauma and victimization may have impacted the development of offending behaviors among some youth, this group is heterogeneous and the majority (72%) of sex offending girls in this sample were not sexually abused. Even if this is partly due to the possibility of underreporting, this finding disputes the contention that sexual abuse and/or trauma are necessary precursors for girls’ sex offending. Studies in which all, or nearly all, sex offending girls reported sexual abuse were usually based on small sample sizes and/or inpatient samples. For example, Hunter et al. (1993) and Bumby and Bumby (1993) found that 100% of the girls in their study reported having been sexually abused; however, these samples were small (N = 10 and 12, respectively) and drawn from residential treatment centers. These girls likely represent the subgroup who are more outwardly psychologically disturbed and thus have been referred for residential treatment. Yet there are other girls who have not typically been represented in research samples who were not referred for residential
treatment but rather are immediately incarcerated. Thus the “victim-to-offender” model is only applicable for a subset of sex offending girls (Briggs, 1995).

For the substantial proportion of girls who did not experience trauma and may not overtly display mental health symptoms (and who thus may never be referred for mental health treatment and included in psychologists’ research on sex offenders), it is unclear what life experiences predisposed them to offending. It is likely that other factors, such as biological, familial, and/or social influences, may play an important role among these adolescents. In the research-based interdisciplinary model recently proposed by Goldweber et al. (2009), interpersonal victimization is but one of multiple factors that may contribute to the development of offending behaviors. Other factors include biological (early pubertal maturation, low cortisol levels), psychological (impulsivity, heightened sensitivity to stimulation) and social (deviant peers, poor parental monitoring) influences. These authors assert that these factors may be relevant for both boys and girls although certain factors, such as interpersonal victimization, appear more relevant for girls because girls experience them at higher rates (see also Broidy & Agnew, 1997; Moffitt et al., 2001). The results of my study suggest that this interdisciplinary model may apply to sex offending girls as well.

Unexpected Findings

Exposure to Violence

Among the most unexpected findings of the current study was that nearly twice as many sex offending girls had witnessed violence as had been sexually victimized. This finding represents a departure from existing research in that although many previous studies have examined the role of sexual victimization in the development of sexually violent behavior, few have empirically investigated how observing the violent acts of
others may contribute to sex offending. These results suggest that the role of witnessing violence merits further examination: of the four types of traumatic experiences assessed in the current study (witnessing violence, physical abuse, sexual abuse, and neglect), witnessing violence was the most common, suggesting it may play a key role in the etiology of violent sex- and non-sex offending behavior. Not only was exposure to violence more common than expected (particularly among sex offenders), there were also gender differences such that significantly more sex offending girls than boys had witnessed violence. This finding is similar to that of the only other large, community-based study which examined the role of witnessing family and community violence among juvenile sex offenders of both genders: Schwartz et al. (2006) studied 813 youth with sexual behavior problems and found that sex offending girls were significantly more likely than boys to witness domestic violence and sexual deviance within the home. Other research has found an association between witnessing family violence and an increased risk of developing sexually inappropriate behavior (Bailey, 2000; Maker, Kemmelmeier, & Peterson, 1998) and exposure to violence against females has been found to predict sex offending among adolescent boys (Hunter, 2004). Yet because this process has not been extensively studied among girls, it is unclear whether the mechanisms contributing to sex offending behavior are gender-specific.

One reason witnessing violence may be linked to offending behavior is that it may interfere with the development of empathy. When youth consistently observe aggression among their family and/or peers, it normalizes violence as a way of relating with others and solving problems (Hindelang, Gottfredson, & Garofalo, 1978; Nofziger & Kurtz, 2005). Among sex offenders, reduced levels of empathy are significantly linked
with cognitive distortions and the rationalization of abusing others (Finkelhor, 1984). Additionally, adolescence is a critical period for cognitive and moral development, which are central components of forming empathy for others. Youth with lower IQ are at higher risk for delinquent behavior and have lower levels of moral maturity than controls (Hunter et al., 2006). Some have suggested that emotional bonds have a stronger influence on violent delinquency among females than males (Cauffman, 2008); if so, relationship and empathy problems may place girls at a particularly high risk for perpetrating violence (Odgers et al., 2005).

From a social learning theory perspective, Matthews et al. (1997), among others, suggested that sex offending girls have been exposed to the modeling of interpersonal aggression and it is the observation of aggressively sexual behaviors that contributes to the development of sex offending. However, the results of my study suggest that observing other types of relational violence, in addition to sexual behavior, may also play an important role in this process; furthermore, as will be discussed in the section on poly-victimization, the cumulative observations of violence have an additive, and potentially harmful, effect on youth. The fact that many youth in this study were exposed to violence is also consistent with national surveys of non-delinquent youth. In the most comprehensive survey to date of youth’s exposure to violence (N = 4,549 youth aged 10-17), Finkelhor, Turner, Ormrod, Hamby, and Kracke (2009) found that more than 60% of individuals surveyed had been exposed to direct or indirect (witnessing) violence within the past year. Similar to other research, children who were exposed to one type of violence, both in the past year and over their lifetimes, were at far greater risk of experiencing other types of violence. However, most of these youth do not go on to
become involved in the justice system (Bartol, 2006; McKnight & Loper, 2002), so these high rates of exposure lend themselves to the need for a better understanding of factors that mitigate the negative effects of these experiences.

In chaotic households, exposure to violence may be common because youth are poorly-supervised (Center for Sex Offender Management, 1999) and violence and deviant behavior may become normalized for adolescents in these environments (Taylor et al., 2008). The current study did not assess other exposure experiences that have been found to influence the development of sexually deviant behavior among boys, such as early introduction to pornography and observing familial/peer sexual acts (Finkelhor & Araji, 1986). Thus future researchers may wish to examine possible interaction effects among these variables.

It is possible that previous research on sex offending girls has underestimated the role of general violence exposure in the development of problem behaviors. Indeed, the majority of existing studies on sex offenders have focused extensively on “direct” victimization experiences (such as sexual abuse) and conclude that they are risk factors for sex offending without examining the role of “indirect” experiences, such as observing violence, that could prove equally as traumatic. Observing violence has been linked to the development of stress symptoms. In a sample of 898 juvenile detainees, more than half of the participants with PTSD reported witnessing violence as the precipitating trauma (Abram et al., 2004). Other studies have similarly found that the likelihood of delinquency increases when a teenager is a witness to or victim of violence and experiences traumatic stress as a result (see Ford, 2002). Violence exposure may also interact with other experiences, such as childhood maltreatment, to contribute to
externalizing problems, particularly among high-risk youth (see Taylor et al., 2008). It is thus likely that likely that exposure to violence, through direct and indirect forms, is problematic and both should be included in studies of adolescent delinquency.

**Physical abuse and neglect**

Another unexpected result was that girls in both groups had experienced more physical abuse and neglect than boys, which parallels the findings of smaller-scale (N = 11) research on adolescent sex offenders (Kubik et al., 2002). In some studies of delinquent youth, physical abuse emerged as a stronger predictor of physical aggression than other types of maltreatment (e.g., Cullerton-Sen et al., 2008) and a study of 625 adjudicated delinquent youth in California found that girls experienced greater incidences of physical abuse and neglect than boys (McCabe, Lansing, & Garland, 2002). In fact, in a recent review of the current research on girls’ delinquency, Foley (2008) concluded that neglect and physical abuse are, along with family problems, the top risk factors for offending.

Indeed, girls who experience physical abuse and neglect likely lack healthy familial support. From an attachment theory perspective (Bowlby, 1969, 1988), experiences such as neglect—and the caregiver instability that often results if the victim is removed from the home—reduce these girls’ ability to develop healthy relationships, and contribute to various psychosocial difficulties. In some samples, neglected children have been found to be more psychologically disturbed than abused children (see Widom, 1989) and childhood neglect has been found to be associated with the development of PTSD among adults (Grassi-Oliveira & Stein, 2008). It is also possible that experiences such as physical abuse and neglect contribute to the processes of disempowerment and dehumanization that can result in youth going on to act violently against others.
(Gerber, 1990). In light of these findings, trauma-based models that have been used to explain adolescent female sex offending, such as the IPTM (Burgess et al., 1987) may need to be expanded to include various types of trauma in addition to sexual abuse.

Malinosky-Rummell and Hansen (1993) reviewed research on the long-term consequences of childhood physical abuse and concluded that such abuse can result in a range of negative effects including relational aggression, as well as internalizing problems such as depression. They note that physically abused youth display significantly more emotional problems, including anxiety and depression, than nonabused community children; whereas abused youth have more emotional problems than nonabused children, family variables, such as marital violence and parent-child interaction problems may also contribute to these difficulties.

In the development of sex offending behavior, the role of physical victimization as a possible contributing factor has been much less investigated than sexual victimization. A recent study by Merrick, Litrownik, Everson, and Cox (2008) lends support for the suggestion that physical maltreatment may be linked to the development of sexualized behaviors. These researchers examined the Child Protective Service reports of 690 children to examine the impact of types of maltreatment on the development of sexualized behaviors and found that the impact of physical abuse differed by gender, with physical abuse predicting sexual intrusiveness and displaying private parts in boys, and boundary problems in girls. Retrospective studies of adult sex offenders have also lent support for gender differences in these experiences; in his study of pedophiles, Allen (1991) found that more women than men reported that they had experienced parental physical abuse and run away from home during their adolescence. Thus it
appears that whereas physical abuse and neglect have been studied as risk factors for juvenile delinquency (see Hubbard & Pratt, 2002), future research on adolescent sex offending could benefit from an inclusion of these variables.

Cumulative exposure to violence and poly-victimization

Post-hoc analyses revealed that a large proportion of youth had been victimized across multiple domains, yet perhaps most surprising was the finding that significantly more girls had experienced this so-called “poly-victimization” than boys. Two thirds of sex offending and delinquent girls had been poly-victimized, compared with 39% of sex offending boys and half of delinquent boys. Thus the majority of girls in this sample had already endured a variety of victimization experiences prior to entering the justice system. This finding highlights not only the instable and traumatic nature of their backgrounds, but also the striking similarity among sex- and non-sex offending girls in these patterns.

Poly-victimization has not been extensively studied among delinquent girls, yet studies of community children have begun to illustrate its prevalence as well as its potentially negative effects. Finkelhor et al. (2007) found that poly-victimization was highly predictive of trauma symptoms and when taken into account, greatly reduced or eliminated the association between individual victimizations (e.g., sexual abuse) and symptomology. These findings are consistent with research which suggests that PTSD more often develops in response to lifetime stress exposure (Hien et al., 2009). For youth who have experienced many childhood victimizations, they may be viewed not as a succession of single traumatizing events, but rather as a pattern of ongoing or multiple victimizations; indeed, Clausen and Crittenden (1991) write that “for some victimized children, victimization is more of a ‘condition’ than an ‘event’ as portrayed in the early
traumatic stress literature” (p. 9). Multiple victimizations may be a sign that children are poorly supervised, socially isolated, or both, and these youth often lack the resources to cope with these experiences (Finkelhor et al., 2007).

Previously victimized children, particularly those experiencing child maltreatment or family violence, also appear to be at greater risk of subsequent victimizations (Duncan, 1999). These children often suffer from poor impulse control and/or lack of supportive relationships and may place themselves in risky situations where they encounter additional trauma (Lahey et al., 2006) and studies have found that girls who have been sexually abused have an increased likelihood of future sexual assault, rape (Levine & Kanin, 1987), and prostitution (Calhoun, 1993). It is unclear whether these findings also have implications for the development of sex offending behavior.

In addition to the traumatic stress symptoms that may be expected as a result of multiple victimizations, research has shown poly-victimization is associated with other psychological problems. Malinosky-Rummell and Hansen (1993) found that experiencing more than one form of childhood victimization is correlated with more substance abuse, suicidality, and emotional problems than experiencing of one type of maltreatment. In Finkelhor et al.’s (2007) study, past-year poly-victims comprised 80% of the 10–17-year olds with clinical levels of anxiety and 86% with clinical levels of depressive symptoms. Given the high proportion of delinquent girls experiencing these mental health problems, future researchers may wish to explore the prevalence of poly-victimization among this population to determine whether it contributes to the development of these issues.
There are other research implications for poly-victimization as well. Finkelhor et al. (2007) argue that poly-victimization is an important area of interest because most studies on individual types of victimization have failed to obtain complete victimization profiles. They note that past studies: (1) may exaggerate the contribution of a single type of victimization to mental health problems, (2) do not delineate the interrelationships among victimizations and the contribution of these interrelationships to mental health problems, and (3) often fail to identify within victimized samples certain groups of chronically or multiply victimized children who may be at particular risk. Finkelhor et al. (2007) found that poly-victimization accounted for a considerable portion of explainable variation in traumatic symptoms among youth. Studies concerned with single forms of victimization (such as sexual abuse or exposure to community violence) may have overestimated the unique association between these variables and various negative outcomes because they did not adequately control for other kinds of victimization. These authors conclude that only assessing for one type of victimization is not sufficient.

This proposition may partly explain why some sex offender research appears to have found strong associations between variables such as sexual abuse and subsequent sex offending. Though these variables are important to investigate, the results of my study suggest that the inclusion of additional variables—and perhaps the cumulative effect of these variables—could improve this explanation. Additionally, many of these studies were descriptive in nature, thus the amount of variance explained by any single variable is unknown. Given that the risk factors for girls’ involvement in the juvenile justice system are often interrelated (see Hubbard & Pratt, 2002), a model
which takes “poly-victimization” into account could provide a more comprehensive explanation of the etiology of violent offending behaviors, and possibly explain some of the discrepancies of previous research.

**Other possible risk factors**

Perhaps one of the most surprising findings of this study is that a large proportion of youth did not report having been victimized. Nearly a third of girls and approximately half of boys had not witnessed violence or experienced sexual/physical abuse, neglect, or trauma. These findings call to question the assumption that pathways to offending depend on traumatic victimization experiences. For these youth, processes other than cognitive and emotional responses to trauma and victimization are likely involved which have contributed to the development of violent behavior.

It is possible that these youth have been exposed to risk factors that were not assessed in this study, and these variables may or may not be gendered. Cauffman (2008) notes that many factors found to put girls at risk for offending also predict delinquency among boys, such as low IQ and lack of empathy (Hunter et al., 2006) and family problems (Bloom, Owen, Deschenes, & Rosenbaum, 2002; Cauffman, 2008; Odgers, Moretti, & Reppucci, 2005). Psychobiological factors are relevant for both girls and boys but differ by gender; among girls, early menarche has been linked to the development of antisocial behavior (Moffitt, 1993; Moffitt et al., 2001), in part because early-maturing girls tend to associate with older peers.

Similarly, research on adolescent sex offenders has included variables that were not in the present study, and the most comprehensive theoretical model would likely include a variety of risk factors. For example, the multifactorial model of adolescent sex offending proposed by Becker (1988) posits that a combination of individual (i.e.,
childhood abuse, impulse control), family (i.e., poor parenting), and environmental (i.e., peer) factors put adolescents at risk for committing sexual offenses. Cognitive factors are a key component of several prominent theories of sex offending (e.g., Abel et al., 1988; Becker, 1988; Finkelhor & Araji, 1986). Although this study did not assess cognitive factors specifically, several key variables of interest appear found to be associated with cognitive development. For example, trauma exposure has been found to affect cognitive development (Hien et al., 2009). It is possible that the impact of multiple traumas (such as in cases of poly-victimization) may amplify this effect.

More research is necessary to determine the extent to which meaningful gender differences exist for exposure to the risk factors for both sex-and non-sex offending. A meta-analysis by Hubbard and Pratt (2003) found that whereas many of the strong predictors of female delinquency are the same as those for males—such as a history of antisocial behavior, antisocial attitudes, antisocial peers, and antisocial personality—school and family relationships and a history of physical and/or sexual abuse are also robust predictors of girls’ offending. Gender differences may lie not in whether certain factors are more powerful than others, but in individuals’ exposure to them: for example, the influence of antisocial peers may be more relevant for boys, whereas childhood victimization may be more salient for girls, due to differences in base rates (Belknap & Holsinger, 2006). This explanation seems to have been more readily accepted by authors in the criminology field (e.g., Andrews et al., 2006) than in the psychology arena.

Another possibility is that some of these youth meet the criteria for psychopathy. Widom (2000) notes that a small proportion of delinquent youth go on to develop
persistently antisocial lifestyles, perhaps regardless of the risk factors to which they have been exposed. These youth may meet criteria for antisocial personality disorder upon entering adulthood. Considering the factors associated with the development of psychopathy during adolescence include some of the variables in this study (e.g., physical abuse and neglect; McBride, 1998), it is important to identify these youth as early as possible. Empirically-validated assessments such as the Psychopathy Checklist-Youth Version (PCL-YV; Book, Clark, Forth, & Hare, 2006) can assist in more accurately making this determination. Further, not only is psychopathy notoriously resistant to treatment (Hare, 2006; Vien & Beech, 2006), but it also represents an important typological distinction between youth who are more likely to be persistent offenders and youth who are limited to offending during adolescence (Krischer & Sevecke, 2008; Parks, 2004). Youth who score higher on measures of psychopathy have been found to be more sexually deviant and have higher rates of recidivism (Gretton, McBride, Hare, O'Shaughnessy, & Kumka, 2001): A meta-analysis of 82 recidivism studies identified deviant sexual preferences and antisocial orientation—not childhood abuse and neglect—as the major predictors of sexual recidivism for both adult and adolescent sexual offenders (Hanson & Morton-Bourgon, 2005).

**Implications for the “Gender Paradox”**

The girls in this sample had indeed been exposed to more physical and sexual abuse, neglect, and trauma than boys, and reported higher rates of internalizing and externalizing symptoms as well as mental disorders. In fact, the only area in which girls were not significantly worse off than boys was drug and alcohol use, which was consistent with previous literature (see Moffitt et al., 2001). Thus these results appear consistent with the notion that girls have been exposed to more risk factors than boys
on their pathways to offending and may support the possibility of a “gender paradox.”

Though this may be the case for some girls in this sample, it does not account for the possibility that the boys in this sample may have been exposed to high levels of other risk factors that were not examined. Many studies (including the current research) which examine female pathways to offending do not include risk factors that may be more common among boys. For example, Moffitt et al. (2001) found that antisocial boys had been exposed to higher levels of family predictors (i.e., years with single parent, family socioeconomic status); cognitive and neurological predictors (i.e., IQ score, memory score); childhood behavioral predictors (i.e., teacher/parent report of hyperactivity); peer relations predictors (i.e., peer rejection, peer delinquency); and personality trait predictors (i.e., self-control, stress reactivity) than girls. These factors could be highly influential in boys’ pathways to offending and it may be that girls do not surmount a higher risk threshold, but rather that certain risk factors are more salient by gender. It could also be that some girls in this study were exposed to high levels of these risk factors; future research would benefit from the inclusion of a wider variety of psychological, social, and cognitive/neurological variables.

The suggestion by some proponents of the “gender paradox” hypothesis, such as Silverthorn and Frick (1999), that girls who exhibit antisocial behavior are typically a homogeneous group with severe etiological histories, was not supported by this research. Although this study only examined some types of victimization variables and thus some girls may have more severe histories than were measured in this study, a substantial proportion of girls who committed violent offenses did not report extensive histories of violence and mental health problems. The notion that girls who offend are
necessarily more disturbed than boys may be, in part, shaped by societal expectations that girls do not commit violence and/or sex offenses. Based on their study, Mathews et al. (1997) concluded that compared with the sex offending boys in their sample, many girls were equally as disturbed and dangerous, with offending histories which included extensive offending against multiple victims. Furthermore, nearly equal numbers of girls as boys used force. The notion that antisocial girls are more disturbed than antisocial boys has used higher rates of comorbid psychopathology among offending females as evidence (Loeber & Keenan, 1994), yet this psychopathology may be just as likely the result of antisocial behavior as the cause. For example, girls’ aggression is often subject to condemnation, which ultimately produces more feelings of guilt and anxiety about aggression among girls than boys (Campbell, Muncer, & Gorman, 1993). In addition, girls who depart from traditional definitions of femininity by engaging in violence are labeled as more “deviant” than aggressive boys (Chesney-Lind & Shelden, 1998; Daly & Chesney-Lind, 1988). Thus the very definitions of what constitutes antisocial behavior among adolescents may be gendered and subject to researcher bias.

**Implications**

**Assessment**

The results of this study have implications for both the risk and clinical assessment of sex offending girls. Brumbaugh, Hardison Walters, and Winterfield (2009) note that such assessments can be used at several different points in the justice system, such as prior to sentencing to inform placement decisions, as well as in correctional facilities and residential programs to help guide treatment and release planning. Given the wide variability in the life experiences of the youth in the current study, it is recommended that risk assessments be sensitive to individual differences. For example, assessments
that examine trauma as a central factor predisposing youth to violence can be useful, but this study’s findings suggest that comprehensive assessments which span a variety of biopsychosocial factors may be the best-informed approach. Multifaceted risk assessments such as the PACT may be more effective than traditional risk assessments because they are not simply based on previous delinquent behaviors but instead take a variety of factors into account. This study’s findings on poly-victimization also indicate that for youth who commit violent offenses, it may be that knowledge of the cumulative exposure to multiple risk factors is more informative than the presence of one particular risk factor. One benefit of instruments such as the PACT is that the youth’s total risk score is based on his/her cumulative scores across a variety of domains.

Accurate screening is critical because it should not be assumed that all girls who enter the justice system have been victimized; consistent with recommendations by authors such as Cauffman (2008), case dispositions should be made on an individual basis for both girls and boys, rather than gender alone. A multi-domain screening instrument, such as the PACT, administered quickly after disposition could be instrumental in this decision. Assessments should be conducted by specially-trained evaluators and should be guided by best practices, such as using gender-and culturally-specific norms where applicable (see Greene, 1998). It is critical that juvenile justice departments invest resources to not only maintain the most current instruments, but also train staff in implementing these practices.

It is important to bear in mind the inherent limitations in assessment. Both typological classifications and risk assessments appear to consistently do a better job of
identifying individuals who display the characteristics of interest than those who do not. The logistic regression analyses in this study reiterate this limitation: among both girls and boys, models more accurately predicted membership in the sex offender group among youth who had been sexually abused than among those who had not. Thus youth who do not have these experiences—which, as this study’s results suggest, may comprise a large number of individuals—may be more difficult to identify, making assessment efforts more complex. Additionally, if girls’ delinquent behavior is more difficult to predict than boys’, as suggested by Goldweber et al. (2009), the inherent limitations in the predictive validity of risk assessments should be noted.

The results of this study generally support the current assessment procedures utilized by the Florida DJJ; that is, the use of a broad preliminary assessment, such as the PACT, to identify youths’ needs across a variety of domains. Youth who are identified as higher-risk should be referred for additional treatment and depending on their needs, more focused, gender-responsive assessments could then be used to identify other needs. For example, assessments such as the Trauma Symptom Checklist for Children (Briere, 1996) could be used with youth who have experienced trauma. For youth who have not experienced trauma or victimization (a substantial proportion in my study), assessments such as the PCL-YV (Book et al., 2006) could be helpful. Additionally, Brumbaugh et al. (2009) recommend the inclusion of strengths-based assessments in addition to risk-based instruments. Though not examined in this study, the PACT does contain several items designed to assess the presence of protective factors, which are then integrated into case management and treatment decisions. Thus awareness of these factors can be used in conjunction with treatment
and release planning as part of the multidisciplinary approach to sex offender treatment and management that is recommended by the Center for Sex Offender Management (1999).

**Treatment**

Entry into the juvenile justice system can serve as an important first step in the process of identifying youth in need of mental health treatment. As the results of this study show, many delinquent youth who have psychological symptoms do not receive treatment services. Although juvenile justice systems have become increasingly aware of this need (Snyder & Sickmund, 2006), the accurate identification of youth in need of mental health services is not, by itself, sufficient to improve the effectiveness of rehabilitation efforts. Rather, once mental health problems are identified, treatment programs and interventions must be tailored either to address these problems specifically or to take them into account when addressing other (e.g., behavioral or interpersonal) problems (Foley, 2008). Cauffman (2004) posits that effective rehabilitation for delinquent youth requires that (1) psychological problems be accurately diagnosed (through initial screening and subsequent clinical assessment); (2) those youth who are in need of treatment receive it; and (3) the services provided be developmentally and culturally informed.

The role of exposure to violence, and the possible resulting trauma from these experiences, should be considered while making disposition decisions; however, it is imperative to keep possible clinical biases in mind (such as the tendency to view females as “victims”). The results of this study implicate needs-based treatment approaches as opposed to gender-based approaches; in other words, it should not be assumed that girls need trauma-based treatment simply based on their gender. For
those youth who have experienced trauma, clinical intervention is essential, particularly in addressing symptoms such as emotional dysregulation, aggression, and impulsivity that often accompany PTSD (Hien et al., 2009). Recently, several treatment programs, such as the Trauma Affect Regulation: Guide for Education and Therapy (TARGET; Ford & Russo, 2006) have been developed and adopted by some juvenile justice departments to address this need. These programs are part of broader initiatives in several states that aim to make juvenile justice services “trauma-informed” (Greene, 1998). Whereas many existing programs target substance abuse, antisocial behavior, and interpersonal skills, fewer target abuse, neglect, family relationships, and mental health issues (Foley, 2008). Mathews et al. (1997) recommend developmentally-informed treatment programs focusing on healthy sexuality, empathy, and relationship formation. Many programs for delinquent girls are based on either “feminist pathways” approaches, which focus on trauma exposure (Daly & Chesney-Lind, 1988; Holsinger, 2000), or interpersonal theories such as Relational-Cultural Theory (Jordan et al. 1991). In order for prevention and education programs for sex and non-sex offending girls to be most helpful, Foley (2008) recommends the integration of aspects of both approaches.

Limitations

There are several aspects of this study’s sample that limit the generalizability of its results. Considering only approximately one third of children who are sexually victimized report the abuse to anyone (Finkelhor, 1984), one significant limitation is that the current study’s sample only included youth whose crimes were officially processed through the Florida Department of Juvenile Justice. These adolescents are a select group of individuals who have made it into the juvenile justice system, and many selection procedures have occurred prior to their placement. As Herman (1990) notes, “The
group of offenders who become ensnared in the criminal justice system must be considered a highly skewed population, in which...those who attack strangers, those who use extreme force, and those who lack the social skills to avoid detection are overrepresented” (p. 180). Additionally, both the male and female offenders in this system represent serious offenders, many of whom show a wide variety of offenses and a long history of problem behavior, to result in adjudication for their offenses. Finally, official data do not reflect crime the moment it occurs; rather, they reflect a lapse between when antisocial behavior began and when, if ever, it was brought to the authorities. Community-based longitudinal studies suggest this time lag is approximately 3-5 years between the onset of antisocial behavior and when it is captured by official data, if ever (Moffitt et al., 2001). Thus even though this study captures youth as they enter the DJJ, it fails to depict changes in exposure to risk factors, as well as offending behavior, that undoubtedly occur over time.

Belknap and Holsinger (2006) note that a limitation when examining the link between victimization and offending is that it is difficult to determine whether victimization precedes delinquency. In a qualitative study, these researchers asked 444 incarcerated youth whether they believed their victimization was related to subsequent offending. A significantly greater proportion of girls than boys believed their victimizations had influenced their subsequent delinquency (Belknap & Holsinger, 2006). However, using a cross-sectional design precluded me from being able to infer whether juvenile justice system involvement preceded, followed, and/or exacerbated youths’ issues.
A key limitation of this study was that it failed to capture the experiences of girls who have been exposed to risk factors, but whose paths did not lead to delinquency. Indeed, treatment and policy for delinquent girls would benefit from a more comprehensive understanding of resilience. Many girls have endured negative life experiences but have adapted, and even thrived, in spite of these circumstances. In a recent report prepared for the U. S. Department of Justice, Hawkins, Graham, Williams, and Zahn (2009) note that protective factors, like risk factors, may be gendered. Effective intervention programs should focus on not only minimizing the damage caused by exposure to risk factors, but improving protective factors as well. Research suggests that risk factors such as poly-victimization may not be easily amenable to change (McKnight & Loper, 2002) and girls and boys may respond differently to protective factors (Fraser, Kirby, & Smokowski, 2004; Resnick, Ireland, & Borowsky, 2004). For example, in their analysis of National Longitudinal Study of Adolescent Health (Add Health) data, Resnick et al. (2004) found that grade point average was the most salient protective factor against violence perpetration for both girls and boys, but family relationships, school connectedness, and religiosity provided protection for girls. Intervention programs which aim to strengthen these factors among girls may serve to protect against delinquency. The relationships among these factors are complex and merit further study, particularly among groups at high risk for delinquency (Hawkins et al., 2009). Hawkins et al. (2009) analyzed the Add Health data of over 22,000 girls and found that for girls who had been physically abused, the presence of a caring adult reduced the likelihood she would commit aggravated assault in adolescence, whereas for girls who had been neglected, religiosity and the presence of a caring adult
increased the likelihood they would commit aggravated assault. These authors note that these results are based on a nationally-representative, normative population and thus cannot easily be generalized to girls with extensive delinquency histories. Thus a major limitation of this study’s design is that it did not measure other potential mediators and moderators of violent behavior, such as relational factors (i.e., parental controls, aggressive peers) that may be particularly relevant for girls (Heimer & DeCoster, 1999).

**Future Directions**

More and more girls enter the juvenile justice system each year and in order to better understand their experiences, particularly those who have committed sex offenses, there is a need for additional community-based research using large, diverse samples of youth (Snyder, 2002). Although the results of this study provide an understanding of violent delinquent youth that is more generalizeable than previous studies which relied on small clinical samples, the need remains for both quantitative and qualitative research that builds on the scant existing literature on girls who sexually offend.

Given there are no well-tested theoretical models to explain the etiology of adolescent female sex offending, one area that could benefit from further research is theory development. Whereas a multifactorial model likely offers the most comprehensive and well-informed approach, such a model could benefit from continued investigation of the degree to which these factors are gendered. For example, an empirically-based model would take gender differences in interpersonal relationships into account, given that antisocial girls have more general relational problems than their male counterparts (Moffitt et al., 2001) and a large body of research suggests gender differences in relationship development (see Ehrensaft, 2005). This being said, such a
model should also incorporate a variety of static (i.e., age, offense history) and dynamic (i.e., psychological symptoms) factors to account for heterogeneity among sex offending girls (Craig et al., 2005).

Longitudinal studies are particularly needed for a fuller understanding of the etiology of sex offending behaviors among adolescent girls. This time period is critical in terms of psychosexual maturation and is closely tied to girls’ views of themselves in relational contexts, thus incorporating developmental issues is essential (Hunter et al., 2006). Additionally, qualitative studies may help provide insight into the development of offending behaviors among girls. For example, when Belknap and Holsinger (2006) conducted focus groups with incarcerated delinquent girls as part of a statewide assessment in Ohio, many girls reported having experienced traumatic events, such as parental abandonment and witnessing abuse of others, that they feel contributed to the development of their delinquent behavior. In other words, many girls experience events as traumatic that have not often been assessed in sex offender research. Hearing about these girls’ experiences from their own perspectives adds an important dimension that can provide information not available using quantitative methods alone.

Finally—and perhaps most importantly—the results of this study reiterate the need for researchers to incorporate a variety of perspectives into their studies in hopes of reducing potential biases. The view of females as “victims” that may be held by some researchers and clinicians is not necessarily evidence-based: for example, some studies of intimate partner violence based on self-report have found that female offenders match or exceed male offenders’ rates of abuse (Moffitt et al., 2001). The role of societal biases and expectations, combined with availability heuristics which may be
unconsciously incorporated into research designs, may be significant (including in the current study). For research to be scientifically-grounded it is important to keep these biases in mind and take whatever steps possible to reduce them.

Conclusions

This study proved in some ways consistent with, and in others a departure from, previous research on adolescent female delinquency and sex offending girls. The finding that many girls had been victimized, in a variety of ways, suggests that these experiences may have contributed to their offending behavior. As expected, the largest effects were for sexual victimization across all groups. These findings provide support for theories such as “feminist pathways theories” that seek to explain how risk factors for delinquency may be gendered (see Belknap and Holsinger, 2006). For girls who have been victimized—particularly those who have been poly-victimized—these experiences, particularly when they interact with mental health problems, serve to put them at risk for the development of offending behaviors (Widom, 1989; Widom, 2000). However, the large proportion of youth who did not share these experiences represents a “lost” group that may be overlooked and/or misclassified during prevention and intervention. While typologies for sex offending girls are still being developed and can aid in the currently inadequate classification and risk assessment procedures for sex offending girls, the unexpected results of this study caution against stereotyping these girls’ experiences.

“Poly-victimization” is a relatively new topic of research and the results of this study suggest it merits inclusion in future studies of sex-and non-sex offending youth. The current study is the first to explore the role of poly-victimization as a potential risk factor for the development of sex offending behaviors among adolescent girls. However,
the effects of poly-victimization may not necessarily be gender-based and it may be that higher levels of cumulative traumatic exposure, regardless of gender, places individuals at a greater risk for antisocial behavior.

The present study has implications for legal policy, particularly given that many states are currently moving toward evidence-based practice (Center for Sex Offender Management, 2007). In terms of the treatment and management of juvenile sex offenders, the results of this study fit within the recent recommendations for multidisciplinary management as established by the Center for Sex Offender Management (1999, 2007), which include a coordinated continuum of care and collaboration among various agencies. Hopefully studies such as this can help inform public policy such that prevention, intervention, and rehabilitation programs for juveniles are evidence-based, as recommended by recent authors.

In conclusion, this study highlights the intersection between the fields of criminology and psychology while also confirming the current research inconsistencies in these areas. Though this may be in part due to the differences in theoretical perspectives in these disciplines, there is a need for these fields to inform one another given that criminal behavior is human behavior (Foley, 2008). Factors such as emotional distress, mental disorders, and sexual/physical victimization have been focused on extensively in the sex offender literature; however, criminological research on juvenile recidivism has demonstrated that these factors are of relatively low predictive validity compared with factors such as a history of antisocial behavior, antisocial peer associations, and substance abuse (Andrews & Bonta, 2003; Andrews, Bonta, & Wormith, 2006). It is possible that expectations have influenced previous
research, and the strong focus on sexual victimization in the existing female sex offender literature may have been partly based on availability heuristics and particular characteristics of small clinical samples. It may be difficult for researchers and clinicians alike to imagine how girls who have not been victimized could commit these types of violent crimes. Hopefully, future research will help illuminate the processes involved for these youth and improve the efficacy of prevention and intervention efforts.
**APPENDIX A**  
**DEFINITION OF OFFENSES**

<table>
<thead>
<tr>
<th>Offense name</th>
<th>Definition</th>
<th>Florida Statute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felony Sexual Battery</td>
<td>Oral, anal, or vaginal penetration by, or union with, the sexual organ of another or the anal or vaginal penetration of another by any other object; does not include an act done for a bona fide medical purpose.</td>
<td>794.011 (2008)</td>
</tr>
<tr>
<td>Lewd or Lascivious Battery</td>
<td>Engaging in sexual activity with a person 12 years of age or older but less than 16 years of age or encouraging, forcing, or enticing any person less than 16 years of age to engage in sadomasochistic abuse, sexual bestiality, or any other act involving sexual activity.</td>
<td>800.04 (2006)</td>
</tr>
<tr>
<td>Lewd or Lascivious Molestation</td>
<td>Intentionally touching in a lewd or lascivious manner the breasts, genitals, genital area, or buttocks, or the clothing covering them, of a person less than 16 years of age, or forces or entices a person under 16 years of age to so touch the perpetrator.</td>
<td>800.04 (2006)</td>
</tr>
<tr>
<td>Lewd or Lascivious Conduct</td>
<td>Intentionally touching a person under 16 years of age in a lewd or lascivious manner or soliciting a person under 16 years of age to commit a lewd or lascivious act.</td>
<td>800.04 (2006)</td>
</tr>
</tbody>
</table>

---

9 Based on *Uniform Crime Reports User Manual* (Florida Department of Law Enforcement, June 2008) and Florida Statute Chapter 985 (2008).

10 Intended as a reference guide and does not include all relevant statutes and codes.
### Felony violent offenses

<table>
<thead>
<tr>
<th>Offense name</th>
<th>Definition</th>
<th>Florida Statute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggravated Assault</td>
<td>An assault with a deadly weapon without intent to kill or with an intent to commit a felony.</td>
<td>784.021 (2008)</td>
</tr>
<tr>
<td>Aggravated Battery</td>
<td>Intentionally or knowingly causing great bodily harm, permanent disability, or permanent disfigurement, or using a deadly weapon.</td>
<td>784.045 (2008)</td>
</tr>
<tr>
<td>Felony Battery</td>
<td>Actually and intentionally touching or striking another person against the will of the other and causing great bodily harm, permanent disability, or permanent disfigurement.</td>
<td>784.03 (2008)</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>Forcibly, secretly, or by threat confining, abducting, or imprisoning a child under the age of 13 against her/his will and without lawful authority, with intent to: 1) hold for ransom or reward or as a shield or hostage; 2) commit or facilitate commission of any felony; 3) inflict bodily harm upon or to terrorize the victim or another person; or 4) interfere with the performance of any governmental or political function. The confinement is against the victim’s will if it is without the consent of her/his parent or legal guardian.</td>
<td>787.01 (2009)</td>
</tr>
<tr>
<td>Murder and Non-negligent Manslaughter</td>
<td>The killing of one human being by another. Generally, any death due to a fight, argument, quarrel, assault or which occurs during the commission of a crime or by premeditated design is included in this category.</td>
<td>782.04 (2008)</td>
</tr>
<tr>
<td>Negligent Manslaughter</td>
<td>The killing of another person through negligence.</td>
<td>782.07 (2008)</td>
</tr>
</tbody>
</table>
**APPENDIX B**

**POSITIVE ACHIEVEMENT CHANGE TOOL (PACT) PRE-SCREEN ASSESSMENT**

### Domain 1: Record of Referrals

**Referrals, rather than offenses, are used to assess the persistence of re-offending by the youth. Include only referrals that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court (regardless of whether successfully completed).**

<table>
<thead>
<tr>
<th>1. Age at first offense: The age at the time of the offense for which the youth was referred to juvenile court for the first time on a non-traffic misdemeanor or felony that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 16</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>13 to 14</td>
</tr>
<tr>
<td>12 and Under</td>
</tr>
</tbody>
</table>

**Felony and misdemeanor referrals: Items 2 and 3 are mutually exclusive and should add to the total number of referrals that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court.**

<table>
<thead>
<tr>
<th>2. Misdemeanor referrals: Total number of referrals for which the most serious offense was a non-traffic misdemeanor that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court (regardless of whether successfully completed).</th>
</tr>
</thead>
<tbody>
<tr>
<td>None or one</td>
</tr>
<tr>
<td>Two</td>
</tr>
<tr>
<td>Three or four</td>
</tr>
<tr>
<td>Five or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Felony referrals: Total number of referrals for a felony offense that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court (regardless of whether successfully completed).</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One</td>
</tr>
<tr>
<td>Two</td>
</tr>
<tr>
<td>Three or more</td>
</tr>
</tbody>
</table>

**Against-person or weapon referrals: Items 4, 5, and 6 are mutually exclusive and should add to the total number of referrals that involve an against-person or weapon offense, including sex offenses that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court (regardless of whether successfully completed).**

<table>
<thead>
<tr>
<th>4. Weapon referrals: Total referrals for which the most serious offense was a firearm/weapon charge or a weapon enhancement finding.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Against-person misdemeanor referrals: Total number of referrals for which the most serious offense was an against-person misdemeanor – a misdemeanor involving threats, force, or physical harm to another person or sexual misconduct (assault, coercion, harassment, intimidation, etc.).</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One</td>
</tr>
<tr>
<td>Two or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Against-person felony referrals: Number of referrals involving force or physical harm to another person including sexual misconduct as defined by FDLE as violent felonies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One or two</td>
</tr>
<tr>
<td>Three or more</td>
</tr>
</tbody>
</table>
**Sex offense referrals:** Items 7 and 8 are mutually exclusive and should add to the total number of referrals that involve a sex offense or sexual misconduct that resulted in diversion, adjudication withheld, adjudication, deferred prosecution or referral to adult court.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 7. | Sexual misconduct misdemeanor referrals: *Number of referrals for which the most serious offense was a sexual misconduct misdemeanor including obscene phone calls, indecent exposure, obscenity, pornography, or public indecency, or misdemeanors with sexual motivation.*  
|   | O None  
|   | O One  
|   | O Two or more |
| 8. | Felony sex offense referrals: *Referrals for a felony sex offense or involving sexual motivation including carnal knowledge, child molestation, communication with minor for immoral purpose, incest, indecent exposure, indecent liberties, promoting pornography, rape, sexual misconduct, or voyeurism.*  
|   | O None  
|   | O One  
|   | O Two or more |
| 9. | Confinements in secure detention where youth was held for at least 48 hours: *Number of times the youth was held for at least 48 hours physically confined in a detention facility.*  
|   | O None  
|   | O One  
|   | O Two  
|   | O Three or more |
| 10. | Commitment orders where youth served at least one day confined under residential commitment: *Total number of commitment orders and modification orders for which the youth served at least one day confined under residential commitment. A day served includes credit for time served.*  
|   | O None  
|   | O One  
|   | O Two  
|   | O Three or more |
| 11. | Escapes: *Total number of attempted or actual escapes that resulted in adjudication.*  
|   | O None  
|   | O One  
|   | O Two  
|   | O Three or more |
| 12. | Pick Up Orders for failure-to-appear in court or absconding supervision: *Total number of failures-to-appear in court or absconding supervision that resulted in a pick up order being issued. Exclude failure-to-appear warrants for non-criminal matters.*  
|   | O None  
|   | O One  
|   | O Two  
<p>|   | O Three or more |</p>
<table>
<thead>
<tr>
<th><strong>Domain 2 : Social History</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current is defined as behaviors occurring within the last six months</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. Youth’s Gender</th>
<th>O Male</th>
<th>O Female</th>
</tr>
</thead>
</table>

2a. Youth's current school enrollment status, regardless of attendance: **If the youth is in home school as a result of being expelled or dropping out, check the expelled or dropped out box, otherwise check enrolled.**

<table>
<thead>
<tr>
<th></th>
<th>O Graduated, GED</th>
<th>O Enrolled full-time</th>
<th>O Suspended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O Enrolled part-time</td>
<td>O Dropped out</td>
<td>O Expelled</td>
</tr>
</tbody>
</table>

2b. Youth's conduct in the most recent term: **Fighting or threatening students; threatening teachers/staff; overly disruptive behavior; drug/alcohol use; crimes, e.g., theft, vandalism; lying, cheating, dishonesty.**

<table>
<thead>
<tr>
<th></th>
<th>O Recognition for good behavior</th>
<th>O No problems with school conduct</th>
<th>O Problems reported by teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O Problem calls to parents</td>
<td>O Calls to police</td>
<td></td>
</tr>
</tbody>
</table>

2c. Youth's attendance in the most recent term: **Full-day absence means missing majority of classes. Partial-day absence means attending the majority of classes and missing the minority. Habitual truancy as defined in FS includes 15 unexcused absences in a 90-day period.**

<table>
<thead>
<tr>
<th></th>
<th>O Good attendance with few absences</th>
<th>O No unexcused absences</th>
<th>O Some partial-day unexcused absences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O Some full-day unexcused absences</td>
<td>O Habitual truant</td>
<td></td>
</tr>
</tbody>
</table>

2d. Youth's academic performance in the most recent school term:

<table>
<thead>
<tr>
<th></th>
<th>O Honor student (mostly As)</th>
<th>O Above 3.0 (mostly As and Bs)</th>
<th>O 2.0 to 3.0 (mostly Bs and Cs, no Fs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O 1.0 to 2.0 (mostly Cs and Ds, some Fs)</td>
<td>O Below 1.0 (some Ds and mostly Fs)</td>
<td></td>
</tr>
</tbody>
</table>

3a. History of anti-social friends/companions: **Anti-social peers are youths hostile to or disruptive of the legal social order; youths who violate the law and the rights of others and other delinquent youth. (Check all that apply.)**

<table>
<thead>
<tr>
<th></th>
<th>□ Never had consistent friends or companions</th>
<th>□ Had pro-social friends</th>
<th>□ Had anti-social friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Been a gang member/associate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3b. Current friends/companions youth actually spends time with: **(Check all that apply.)**

<table>
<thead>
<tr>
<th></th>
<th>□ No consistent friends or companions</th>
<th>□ Pro-social friends</th>
<th>□ Anti-social friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Gang member/associate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. History of court-ordered or DCF voluntary out-of-home and shelter care placements exceeding 30 days: **Exclude DJJ residential commitments.**

| | O No out-of-home placements exceeding 30 days | O 1 out-of-home placement | O 2 out-of-home placements | O 3 or more out-of-home placements |
5. History of running away or getting kicked out of home: **Include times the youth did not voluntarily return within 24 hours, and include incidents not reported by or to law enforcement.**

   - O No history of running away/being kicked out
   - O 1 instance of running away/kicked out
   - O 2 to 3 instances of running away/kicked out
   - O 4 to 5 instances of running away/kicked out
   - O Over 5 instances of running away/kicked out

6a. History of jail/imprisonment of persons who were ever involved in the household for at least 3 months: *(Check all that apply.)*

   - □ No jail/imprisonment history in family
   - □ Mother/female caretaker
   - □ Father/male caretaker
   - □ Older sibling
   - □ Younger sibling
   - □ Other member

6b. History of jail/imprisonment of persons who are currently involved with the household: *(Check all that apply.)*

   - □ No jail/imprisonment history in family
   - □ Mother/female caretaker
   - □ Father/male caretaker
   - □ Older sibling
   - □ Younger sibling
   - □ Other member

6c. Problem history of parents who are currently involved with the household: *(Check all that apply.)*

   - □ No problem history of parents in household
   - □ Parental alcohol problem history
   - □ Parental drug problem history
   - □ Parental physical health problem history
   - □ Parental mental health problem history
   - □ Parental employment problem history

7. Current parental authority and control:

   - O Youth usually obeys and follows rules
   - O Sometimes obeys or obeys some rules
   - O Consistently disobeys, and/or is hostile
### 8a. Youth’s history of alcohol use: *(Check all that apply.)*

- [ ] No past alcohol use
- [ ] Past alcohol use
- [ ] Alcohol caused family conflict
- [ ] Alcohol disrupted education
- [ ] Alcohol caused health problems
- [ ] Alcohol interfered with keeping pro-social friends
- [ ] Alcohol contributed to criminal behavior
- [ ] Youth needed increasing amounts of alcohol to achieve same level of intoxication or high
- [ ] Youth experienced withdrawal problems

### 8b. Youth’s history of drug use: *(Check all that apply.)*

- [ ] No past drug use
- [ ] Past drug use
- [ ] Drugs caused family conflict
- [ ] Drugs disrupted education
- [ ] Drugs caused health problems
- [ ] Drugs interfered with keeping pro-social friends
- [ ] Drugs contributed to criminal behavior
- [ ] Youth needed increasing amounts of drugs to achieve same level of intoxication or high
- [ ] Youth experienced withdrawal problems

### 8c. Youth’s Current alcohol use: *(Check all that apply.)*

- [ ] No current alcohol use
- [ ] Current alcohol use
- [ ] Alcohol causing family conflict
- [ ] Alcohol disrupting education
- [ ] Alcohol causing health problems
- [ ] Alcohol interfering with keeping pro-social friends
- [ ] Alcohol contributing to criminal behavior
- [ ] Youth needs increasing amounts of alcohol to achieve same level of intoxication or high
- [ ] Youth experiences withdrawal problems
| 8d. Youth’s current drug use: *(Check all that apply.)* | □ No current drug use  
□ Current drug use  
□ Drugs causing family conflict  
□ Drugs disrupting education  
□ Drugs causing health problems  
□ Drugs interfering with keeping pro-social friends  
□ Drugs contributing to criminal behavior  
□ Youth needs increasing amounts of drugs to achieve same level of intoxication or high  
□ Youth experiences withdrawal problems |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>For abuse and neglect, include any history that is suspected, whether or not reported or substantiated; exclude reports of abuse or neglect proven to be false.</em></td>
<td></td>
</tr>
</tbody>
</table>
| 9a. History of violence/physical abuse: *Include suspected incidents of abuse if disclosed by youth, whether or not reported or substantiated, but exclude reports investigated but proven to be false. *(Check all that apply.)* | □ Not a victim of violence/physical abuse  
□ Victim of violence/physical abuse at home  
□ Victim of violence/physical abuse in a foster/group home  
□ Victimized by family member  
□ Victimized by someone outside the family  
□ Attacked with a weapon |
| 9b. History of witnessing violence: *(Check all that apply)* Include perpetrators and victims of violence as having witnessed violence. | □ Has not witnessed violence  
□ Has witnessed violence at home  
□ Has witnessed violence in a foster/group home  
□ Has witnessed violence in the community  
□ Family member killed as result of violence |
<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>9c.</td>
<td>History of sexual abuse/rape: <strong>Include suspected incidents of abuse if disclosed by youth, whether or not reported or substantiated, but exclude reports investigated but proven to be false. (Check all that apply.)</strong></td>
<td>☐ Not a victim of sexual abuse/rape&lt;br&gt;☐ Sexually abused/raped by family member&lt;br&gt;☐ Sexually abused/raped by someone outside the family</td>
</tr>
<tr>
<td>10.</td>
<td>History of being a victim of neglect: <strong>Include suspected incidents of neglect, whether or not reported or substantiated, but exclude reports investigated but proven to be false.</strong></td>
<td>☐ Not victim of neglect&lt;br&gt;☐ Victim of neglect</td>
</tr>
<tr>
<td>11.</td>
<td>History of mental health problems: <strong>Such as schizophrenia, bi-polar, mood, thought, personality, and adjustment disorders. Exclude substance abuse and special education since those issues are considered elsewhere. Confirm by a professional in the social service/healthcare field.</strong></td>
<td>☐ No history of mental health problem(s)&lt;br&gt;☐ Past history of mental health problem(s) diagnosis (more than six months ago)&lt;br&gt;☐ Diagnosed with mental health problem(s)&lt;br&gt;☐ Only mental health medication prescribed. If yes, list&lt;br&gt;☐ Only mental health treatment prescribed&lt;br&gt;☐ Mental health medication and treatment prescribed</td>
</tr>
</tbody>
</table>
## Domain 3: Mental Health

1. **History of suicidal ideation:** Include any previous thoughts, threats, plans and attempts even if youth indicates they were manipulative or there was no intent. *(Check all that apply)*
   - □ Has never had serious thoughts about suicide
   - □ Has had serious thoughts about suicide
   - □ Has made a plan to commit suicide. If yes, describe _____________________
   - □ Has attempted to commit suicide. If yes, describe attempt(s) and date(s) ______________________
   - □ Feels life is not worth living – no hope for future.
   - □ Knows someone well who has committed suicide. If yes, who, when and how _____________________
   - □ Engages in self-mutilating behavior____________________

2. **History of anger or irritability:**
   - □ No history of anger/irritability
   - □ History of occasional feelings of anger/irritability
   - □ History of consistent feelings of anger/irritability
   - □ History of aggressive reactions to feelings of anger/irritability.
<table>
<thead>
<tr>
<th></th>
<th><strong>History of depression or anxiety</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>No history of depression/anxiety</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of occasional feelings of depression/anxiety</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of consistent feelings of depression/anxiety</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of impairment in every day tasks due to depression/anxiety</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>History of Somatic Complaints:</strong> Bodily or physical discomforts associated with distress, such as stomachaches or headaches.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>No history of somatic complaints</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of one or two somatic complaints</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of three or four somatic complaints</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>History of 5 or more somatic complaints</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>History of thought disturbance</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>No unusual thoughts or beliefs</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Presence of hallucinations (auditory or visual)</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Presence of beliefs that the youth is controlled by others or others control the youth.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>History of traumatic experience:</strong> Lifetime exposure to events such as rape, abuse or observed violence, including dreams or flashbacks.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>No presence of traumatic event</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Presence of traumatic event</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Flashbacks to traumatic event</td>
<td></td>
</tr>
<tr>
<td>Domain 4: Attitude/Behavior Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Attitude toward responsible law abiding behavior:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Abides by conventions/values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Believes conventions/values sometimes apply to him or her</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Does not believe conventions/values apply to him or her</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Resents or is hostile toward responsible behavior</td>
<td></td>
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</tr>
<tr>
<td><strong>2. Accepts responsibility for anti-social behavior:</strong></td>
<td></td>
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<tr>
<td>O Accepts responsibility for anti-social behavior</td>
<td></td>
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<tr>
<td>O Minimizes, denies, justifies, excuses, or blames others</td>
<td></td>
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<tr>
<td>O Accepts anti-social behavior as okay</td>
<td></td>
<td></td>
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<tr>
<td>O Proud of anti-social behavior</td>
<td></td>
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<tr>
<td><strong>3. Belief in yelling and verbal aggression to resolve a disagreement or conflict:</strong></td>
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<tr>
<td>O Believes verbal aggression is rarely appropriate</td>
<td></td>
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<tr>
<td>O Believes verbal aggression is sometimes appropriate</td>
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<tr>
<td>O Believes verbal aggression is often appropriate</td>
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<tr>
<td><strong>4. Belief in fighting and physical aggression to resolve a disagreement or conflict:</strong></td>
<td></td>
<td></td>
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<tr>
<td>O Believes physical aggression is never appropriate</td>
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<tr>
<td>O Believes physical aggression is rarely appropriate</td>
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<td>O Believes physical aggression is sometimes appropriate</td>
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<td></td>
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<tr>
<td>O Believes physical aggression is often appropriate</td>
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<tr>
<td><strong>5. Reports/evidence of violence not included in criminal history: (Check all that apply.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ No reports/evidence of violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Violent outbursts, displays of temper, uncontrolled anger indicating potential for harm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Deliberately inflicting physical pain</td>
<td></td>
<td></td>
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<tr>
<td>☐ Using/threatening with a weapon</td>
<td></td>
<td></td>
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<tr>
<td>☐ Fire starting</td>
<td></td>
<td></td>
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<tr>
<td>☐ Violent destruction of property</td>
<td></td>
<td></td>
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<tr>
<td>☐ Animal cruelty</td>
<td></td>
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<tr>
<td><strong>6. Reports of problem with sexual aggression not included in criminal history: (Check all that apply.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ No reports/evidence of sexual aggression</td>
<td></td>
<td></td>
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<tr>
<td>☐ Aggressive sex</td>
<td></td>
<td></td>
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<tr>
<td>☐ Sex for power</td>
<td></td>
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<tr>
<td>☐ Young sex partners</td>
<td></td>
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<tr>
<td>☐ Child sex</td>
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<tr>
<td>☐ Voyeurism</td>
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<tr>
<td>☐ Exposure</td>
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</tr>
</tbody>
</table>


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BIOGRAPHICAL SKETCH

Amy Christine Van Arsdale was born in Denver, Colorado. The middle of three children, she has an older sister, Sarah, and a younger brother, Mark. Amy graduated from Cherry Creek High School in 1999. She was elected Phi Beta Kappa in 2002, graduated *Summa cum laude* with a Bachelor of Arts in psychology from the University of Colorado-Boulder in 2003, and earned her Master of Arts in counseling psychology from the University of Denver in 2005. Amy received her Doctor of Philosophy from the University of Florida in 2010 and is now an assistant professor of psychology at Marymount University in Arlington, Virginia.