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THE EFFECT OF GENDER ON PERPETRATION CHARACTERISTICS AND EMPATHY
FOR JUVENILE SEX OFFENDERS

by

KATHERINE L. SCHWEIGERT

Under the Direction of Dr. Lesley Reid

ABSTRACT

This research examines the effect of gender on perpetration characteristics and empathy in a sample of juvenile sex offenders in Massachusetts using feminist criminological and gendered theory perspectives. Through the use of ordered logistic regression, I evaluate whether or not a perpetrator's gender has an impact on the characteristics of the offense (such as the use of penetration, fellatio, genital touching, or masturbation) or the levels of empathy and remorse experienced by the offender. The results show that gender only has a significant effect on penetrative acts and remains non-significant for the remaining variables. I have concluded that the non-significance of gender lessens the dissimilarities between juvenile male and female offenders, suggesting that the female offenders are less influenced by gendered socialization. Future research should focus less on the differences between boys and girls and more on those variables that are significant: prior victimization, behavior problems, and problems in school.

INDEX WORDS: Juvenile sex offenders, Gendered perspective, Feminist Criminology, Juvenile female sex offenders

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by

KATHERINE SCHWEIGERT

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

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August 2010

DEDICATION

This thesis is dedicated to Chet Meeks and my grandmother Mary.

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INTRODUCTION

The gender gap in criminal behavior has been narrowing over the past three decades with boys now twice as likely as girls to be arrested, down from four times as likely in 1980 (Cauffman 2008). And yet, the strongest predictor of criminality remains gender (Tracy et al 2009). From 1980 to 2003, the female percentage of the violent crime index (sum of homicide, forcible rape, robbery, and aggravated assault arrests) grew from one-tenth to one-fifth (Steffensmeier 2006: 73). In terms of sexual crimes, according to the FBI Uniform Crime Data in 2007, youths accounted for 15% of forcible rapes and 18% of other sex offenses (FBI Crime Data 2008). Females comprised 1.9% of the adolescents arrested for forcible rape and 9.7% of those adolescents arrested for other sexual offenses. Although rates are changing, there is still a sizeable difference in crime rates between boys and girls, making the study of gender differences an important and necessary step in understanding juvenile crime and delinquency.

This thesis will examine the gender differences in crime rates with regards to adolescent sexual offending through the application of a gendered perspective and feminist criminology. I will use a gendered approach to determine the differences in sexual offending between juvenile males and females. Theory suggests that a gendered perspective can explain gender differences in crime by demonstrating that female participation in crime is lowest for those crimes that diverge the most from traditional gender norms (Steffensmeier & Allan 1996). A gendered perspective should include four key elements: 1) the perspective should help explain both female and male criminality by revealing how the organization of gender deters or shapes delinquency by females, 2) it should account for the differences in the characteristics of the offense in addition to the type and frequency of the crime, 3) it should help determine the ways in which females' routes to crime (especially serious crime) may differ from those of males, and 4) the

perspective should explore the extent to which gender differences derive from biological and reproductive differences as well (Steffensmeier & Allan 1996:474). This would support the lower incidence rates of sexual offenses by females. In keeping with a gendered perspective, females should also show more empathy and remorse.

In addition to a gendered approach, I will also utilize feminist criminological theory to help explain gender differences in juvenile sexual offending characteristics. Feminist criminology attributes female delinquency to childhood trauma, specifically sexual victimization (Chesney-Lind & Shelden 1998). It also calls into question the patriarchy that is present both in criminological research and society. Feminist pathways research expands the link between childhood trauma and delinquency to include males as well (Belknap 2001). Through the feminist perspective, I will attempt to show that prior sexual, physical, and psychological victimization will have a significant effect on the sexual offense characteristics for both boys and girls. More violent and profound abuse should also have an effect on empathy and remorse by making both males and females less empathic and remorseful.

Studies that examine both male and female juvenile offenders attempt to explain differences in the rate of offending and whether male criminological theory can apply to females (Triplett & Myers 1995). Triplett and Myers (1995) argue that to answer these questions requires more than just prevalence and incidence measures, but also an examination of the offense characteristics. A greater understanding gleaned from the study of characteristics of the offense, or modus operandi, can only improve the treatment of child sex offenders (Kaufman et al. 1993). In addition, the accurate assessment of offenders' perpetration characteristics can help interrupt the abuse cycle by identifying the actions that predict offending (1993). In the seventeen years since Kaufman made this claim, the research on patterns in juvenile sex crimes

has remained sparse. As such, a large sample multivariate study of the gender effects on characteristics of the offense can help shape and improve policies and treatment strategies.

With this thesis, I address two of the least researched aspects of juvenile sex offenders: the characteristics of the offense and the levels of empathy and/or remorse expressed by the perpetrator. More specifically, I seek to determine how girls differ from boys in terms of sexual offense characteristics such as penetration, forced penetration with foreign objects, masturbation and fellatio. I will also examine whether girls show more or less empathy and/or remorse towards their victims than boys.

I analyze an existing dataset compiled from detailed case records including medical and professional evaluations (Prentky 2005). The dataset consists of 720 juveniles (male and female) identified through the Assessment for Safe and Appropriate Placement (ASAP) program within the Massachusetts Department of Social Services (DSS) from 1998-2004. The juveniles engaged in sexually inappropriate and coercive behavior towards other children and were studied to help identify risk factors in youth. I utilize multivariate analyses to examine the relationship between gender and offense characteristics while controlling for other factors such as educational and psychiatric characteristics, substance abuse, and prior maltreatment.

Much of the literature on juvenile sexual offending is focused on boys and generally excludes comparison samples of females, while research exclusively involving juvenile female sex offenders is sparse. My thesis aims to fill the gap in juvenile female sex offending research while also adding to the existing literature on juvenile male offenders by including a comparison sample. In addition, the specificities of sexual offenses are often overlooked, with most of the focus on etiology. This thesis, however, seeks to gain a greater understanding of juvenile sex offenders by examining the effect of gender on the offense characteristics and the offender's

ability to demonstrate empathy and/or remorse. It is crucial to understand these aspects of sexual offending when determining future policies and treatment programs for juvenile female sex offenders.

PREVIOUS RESEARCH OF GENDER DIFFERENCES IN SEXUAL OFFENDING Theoretical Explanations for Gender Differences in Offending

Previous work on both male and female juvenile sex offending is bereft of sociological theory, instead discussing the subject from a more clinical angle. However, examining this issue through the lens of sociological theory can help us to better understand the data. The lack of theory in juvenile sex offender literature requires taking a step back and reviewing gendered theories of juvenile delinquency in general. Different criminological and sociological theories can help to explain previous patterns found in research and perhaps predict the outcome of my investigation.

Steffensmeier and Allan (1996) argue that a gendered perspective of crime can help explain gender differences in crime rates. They suggest that female participation in crime is lowest for those crimes that diverge most from traditional gender norms. Further, they state that the "most profound differences between offenses committed by men and women involve the context of offending" (1996:478). Context, in this instance, refers to the characteristics of the offense, "whose interrelationship describes both the circumstances and the nature of the act" (Triplett & Myers 1995: 59). The more serious the offense, the greater the contextual differences by gender (Triplett & Myers 1995; Steffensmeier & Allan 1996). This theory explains the lower rates of female perpetrated sex offenses as these types of offenses diverge most from gender norms. Gendered socialization instills in women a sensitivity to the needs of others and dependency on their approval (1996). This happens more with women than men, and therefore,

they refrain from criminal acts that might hurt others (1996). As sex offending is considered one of the most taboo and abhorrent crimes, females would be less likely to engage in this type of behavior. In addition, those females who do engage in sexual offending show less violence and more empathy and remorse as a result of gender norms. According to this theory, we should see a significant difference in the characteristics of the offense based on gender.

Feminist criminology can also help to explain the gender differences in sexual offending. A feminist perspective can add to traditional delinquency theories "an explicit concern about the role of sexual abuse in girls' delinquency" (Chesney-Lind & Shelden 1998:115). Feminist criminology challenges the patriarchal nature of criminology by calling attention to the omission and misrepresentation of women in criminological theory (1998). As a result, delinquency theory has ignored girls, leading many to wonder whether existing theories can explain criminal and deviant behavior in girls (1998). Feminist pathways research examines girls' and boys' histories in order to understand the link between childhood traumas and subsequent offending (Belknap 2001). The variables leading to problem behavior in girls can be attributed to socialized gender roles, structural oppression, vulnerability to abuse from males, and responses to male domination (Belknap & Holsinger 2006: 50). Belknap & Holsinger argue that the feminist pathways approach offers a better understanding of both female and male offending and the need for intervention and treatment (2006).

Radical feminist criminology takes it further and suggests that physical and sexual victimization of girls can be the underlying cause of criminal behavior. In other words, "the cause of female crime originates with the onset of male supremacy" (Chesney-Lind & Shelden 1998:98). Unlike a psychiatric model, which attributes sexual violence to pathology or disease, a feminist sociocultural model attributes violence to the gender imbalance of power in patriarchal

societies (Scully 1990: 7). The emphasis on childhood trauma within feminist pathways research in addition to radical feminist criminology's specific focus on sexual victimization can help to explain sexual offending in both boys and girls.

Limitations of Previous Studies

While doing much to further understanding of this complicated subject, previous studies have suffered from serious limitations. One of the biggest limitations of past research is a small sample size. Many influential studies contained samples of many fewer than 100 subjects (Fehrenbach & Monastersky 1988, Johnson 1989, Bumby & Bumby 1993, Mathews, Hunter & Vuz 1997, Pithers 1998, Miccio-Fonseca 2000, Vandiver & Teske 2006). One study examined only four girls, certainly preventing any meaningful comparison by gender (Friedrich & Luecke 1988). The only study to date with a sample size larger than the data for this thesis investigated male and female children with demonstrated sexual behavior problems, not specifically sexual offenses (Letourneau, Schoenwald & Sheidow 2004).

The current study is largely based on the widely cited research of Mathews, Hunter and Vuz (1997). Yet, those authors noted that their study is limited by sample size and reliance on retrospective and self-reported data. With the data set for the current study, I directly address these limitations. The current sample size is twice that of the aforementioned study, allowing for a comparison by gender and an investigation of factors that may influence criminal behaviors (Mathews, Hunter and Vuz 1997). Many of the data from the current study come from evaluations and reports by medical workers and other trained professionals. Data collected by medical professionals and other third party individuals comes with its own limitations, which will be addressed later. That being said, the current study will expand the body of knowledge on the subject of juvenile female sex offenders.

Another limitation of previous studies is the use of bivariate analysis, the method of analysis used in Mathews, Hunter and Vuz (1997). Bivariate analysis only examines the effect of a single independent variable. According to the manual, *Statistics for Social Data Analysis* (Knoke et al. 2002), "few social scientists today hypothesize that all the variation in some measure can be completely accounted for by its covariation with a single independent variable" (2002: 235). Single-cause explanations, as seen in previous studies on this subject, are being replaced by complex accounts in which several sources of variation are proposed. With the large sample size in this data set, I will be able to conduct a multivariate analysis, which will strengthen the results.

The research on gender differences in juvenile sex offending, while sparse, provides data that falls naturally into four categories that will help to guide the following review: offender characteristics, psycho-social history, prior victimization, and offense characteristics. The offender characteristics category includes information on the family structure and/or history and sociodemographic factors. Psycho-social history includes academic and cognitive functions and any mental health issues or diagnoses. Prior victimization is any prior physical, psychological, or sexual abuse. Offense characteristics includes details on the actual criminal offense and other sexually inappropriate behaviors.

Family/Characteristics of Offender Although variation exists, there are certain common characteristics found among juvenile female sex offenders. One of the more recurrent characteristics found in the research on etiology involves single mothers. Johnson (1989) found six of the thirteen offending girls lived with single mothers. Single mothers were found to have a series of unsuccessful, and sometimes abusive, boyfriends (Johnson 1989; Vick et al. 2002). Of

the thirteen subjects, Johnson (1989) found a majority of the subjects' mothers were depressed in addition to exhibiting dependent personalities. All but one of the mothers experienced physical abuse, while 85% were victims of sexual abuse (Johnson 1989). The remaining girls from the Johnson study lived with relatives, step-parents or adoptive parents. The only girl who lived with her biological parents was molested by her father (Johnson 1989). Kubik et al. (2002) found that 72.7% of the subjects lived with a foster family. The general consensus is that these homes are chaotic, dysfunctional and overcrowded (Bumby & Bumby 1993; Mathews, Hunter & Vuz 1997; Wood et al. 2000; Vick et al. 2002; Roe-Sepowitz 2008). Families of offenders often display evidence of domestic abuse and drug addiction (Johnson 1989; Gray et al. 1997; Wood et al. 2000; Vick et al. 2002; Tardif et al. 2005). In the Johnson (1989) study, the mothers displayed dependent personalities, and a little over half used drugs and alcohol while parenting.

It is important to be careful of mother blaming when researching familial patterns and characteristics. Some research pathologizes non-heteronormative and single-mother families thereby blaming mothers for "unstable" family environments (Tracy et al. 2009). This must be taken into consideration when attributing delinquency to single parent households or non-nuclear families. In addition, mothers who work for pay are often held responsible for their children's sexual abuse, as they are deemed unable to adequately safeguard their children (McGuffey 2005). Researchers have found a correlation in quantitative data between maternal employment and increased risk of childhood sexual abuse (2005). However, the researchers are confusing correlation with causation and are not questioning gendered assumptions of care (2005: 623). Only problematizing maternal labor market participation diverts attention from the fathers, reaffirming patriarchal gender dynamics. McGuffey found that family trauma is constructed as both the fault and the responsibility of the mothers based on familial networks, social services,

and cultural expectations of motherhood (2005: 641). The literature on juvenile sex offenders focuses primarily on mothers, with little or no discussion of fathers. An analysis of caregivers has not been included in the current study, as the gender of the primary caretaker is not indicated in the data.

Family environments of sex offending youth have been characterized as highly sexualized and tolerant of boundary violations unacceptable in society (Pithers 1998; Vick et al. 2002; Hickey et al. 2008). One study found females were 4.8 times more likely than males to have been exposed, within their families, to adult sexual activity or inappropriate sexual materials (Hickey et al. 2008: 246). Many homes were deemed unable to handle anger productively and the parents demonstrated confused roles (Ray and English 1995). Parents tended to exhibit signs of unresolved abuse and attachment issues. These same parents also had a low socioeconomic status (Johnson 1989; Vick et al. 2002). One study found that 85% of the subjects came from a lower socioeconomic background (Johnson 1989). Further supporting this evidence, a different study found 38% of the families specifically fell below national poverty level, with the mean income at \$18,877 (Gray et al. 1997).

Psycho-Social History The research on social and psychological histories is not conclusive. Reports vary between the subjects displaying no additional behavioral problems beyond abnormal sexual activity to evidence of severe psychoses. Starting with cognitive characteristics, overall, juvenile female sex offenders exhibit a variety of learning disabilities and other behavioral problems in school (Johnson 1989; Bumby & Bumby 1993& 1997; Mathews, Hunter & Vuz 1997; Taylor 2003; Tardif et al. 2005; Roe-Sepowitz 2008). Speaking specifically of learning disabilities, 80% of the sample in one study had diagnosed learning disorders (Tardif et al. 2005) while 83% in another had academic difficulties (Bumby & Bumby 1997). Different

data demonstrated that the intellectual performance of over half the sample was below average, with two-thirds in special education classes (Hendriks & Bijleveld 2006). Past research has also shown that some juvenile female sex offenders have been diagnosed as mentally retarded. Interestingly, comparison samples of males have shown no cases of mental retardation (Mathews, Hunter & Vuz 1997; Kubik et al. 2002). Not just juvenile female sex offenders but also juvenile females with sexual behavior problems were more likely to have low IQs and learning disabilities (Friedrich & Luecke 1988; Johnson 1988; Hunter et al. 1993; Mathews, Hunter & Vuz 1997; Kubik et al. 2002).

Beyond learning difficulties, juvenile female sex offenders have also been found to exhibit psychological disorders. All of the subjects in Johnson's (1989) examination showed signs of depression and anxiety. A later study found nearly half of the 118 girls in the sample had a mental health diagnosis (Roe-Sepowitz 2008). Attention-deficit hyperactivity disorder (ADHD) was present in a number of studies, ranging between 29% of the sample to 53.3% (Gray et al. 1997; Hunter & Lexier 2003). There is also evidence of more extreme psychological disturbances in both juvenile males and females. 93% of fifty-nine subjects (both male and female) met the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for at least one psychological diagnosis (Gray et al. 1997). PTSD was the most common among psychiatric disorders (Hunter et al. 1992; Bumby & Bumby 1997; Mathews, Hunter & Vuz 1997; Gray et al. 1997; Pithers 1998; Vick et al. 2002; Kubik & Hecker 2005; Tardif et al. 2005; Hickey et al. 2008). Close to 50% of the sample in two studies had a diagnosis of PTSD (Hunter & Lexier 2003; Mathews, Hunter & Vuz 1997). Females were much more likely to have PTSD than males (Kubik et al. 2002). In addition to PTSD, evidence of oppositional defiant disorder (ODD), obsessive compulsive disorder, conduct disorder, impulsivity, and suicidal behavior has

been found (Bumby & Bumby 1997; Mathews, Hunter & Vuz 1997; Vick et al. 2002).

Prior Victimization Research has been consistent on the existence of prior maltreatment in juvenile sex offenders. However, the number of incidents and severity differs across studies. In general, females were more likely than males to experience childhood sexual abuse and tended to experience more severe and forceful victimization than males (Fromuth & Conn 1997; Mathews, Hunter & Vuz 1997; Vick et al. 2002; Hickey et al. 2008; Johansson & Kempf-Leonard 2009). Female offenders have been abused by a larger number of perpetrators than males, and they are more likely to have been penetrated during sex (Kubik et al. 2002; Hickey 2008). In addition, females have been abused multiple times and multiple ways (Ray and English 1995). This held true even between sample groups of juvenile female sex offenders and juvenile female non-offenders: 77% of the offenders reported past sexual abuse whereas only 28% of the non-offenders reported abuse (Fromuth & Conn 1997).

Patterns have been evident in the previous maltreatment of juvenile female sex offenders. More juvenile female offenders than juvenile males have been abused by adult females, with one study suggesting females were three times more likely to be abused by other females than the male subjects (Hunter et al. 1993; Gray et al. 1997; Mathews, Hunter & Vuz 1997). The juvenile females were also more commonly younger at first victimization, with some as young as five and six (Johnson 1989; Mathews, Hunter & Vuz 1997; Hickey et al. 2008).

Incest was often present, with girls suffering abuse from a range of family members including fathers, uncles, brothers, step-siblings, cousins, and mothers (Friedrich & Luecke 1988; Johnson 1989; Fromuth & Conn 1997; Mathews, Hunter & Vuz 1997; Miccio-Fonseca 2000; Vick et al. 2002; Tardif et al. 2005). Eleven of the thirteen females from the Johnson (1989) study were victims of incest. As many as 66.6% in one study were victims of intra-

familial abuse from mothers, step-fathers, uncles and brothers (Tardif et al. 2005). An earlier report found that the most common abusers were first cousins of the subjects (Fromuth & Conn 1997). And those cases of abuse that did not involve family members usually included abusers known to the subject, with as many as 92% falling into this category (Fromuth & Conn 1997).

Offense Characteristics Previous studies suggest that the offending characteristics of juvenile female sex offenders follow a similar pattern: the abuse of younger, known children through the use of coercion. Juvenile female sex offenders have been found to engage in a range of sexually abusive acts such as: fondling, kissing, inappropriate touching, and anal and vaginal penetration (Fromuth & Conn 1997; Gray et al. 1997; Kubik et al. 2002; Kubik & Hecker 2005; Tardif et al. 2005; Vandiver & Teske 2006). However, males are more likely to penetrate their victims than females (Hickey et al. 2008). One study found only 12.6% of the females anally or vaginally penetrated the victim, while 11.4% forced the victim to penetrate the perpetrator (Roe-Sepowitz 2008).

Most often, the female offender knew the victim in some capacity (Fehrenbach & Monastersky 1988; Johnson 1989; Hunter et al. 1993; Fromuth & Conn 1997; Gray et al. 1997; Mathews et al. 1997; Miccio-Fonseca 2000; Taylor 2003; Kubik & Hecker 2005; Tardif et al. 2005; Hendriks & Bijleveld 2006; Le Clerc et al. 2008; Roe-Sepowitz 2008). Often, victims were not only known, but also related to the offenders in some way (Fehrenbach & Monastersky 1988; Roe-Sepowitz 2008). As many as 75% of the victims were related, or otherwise known, to their offender in one study that also found that 92% of the incidents occurred in a care situation (Bumby & Bumby 1997). This was also found in Fehrenbach & Monastersky's (1988) study where 67.9% of the offenses took place while the subject was babysitting the victim. Hunter et al. (1993), however, reported that the subjects abused more strangers than acquaintances.

The debate on the offender-victim relationship prior to the abuse is not the only point of contention in juvenile sex offender research. The preferred gender of the victim also varied between studies. Some past research has found boys to be the most common victims (Hunter et al. 1993; Fromuth and Conn 1997; Miccio-Fonseca 2000; Taylor 2003; Tardif et al. 2005). Others report that females are victimized more often (Bumby & Bumby 1997; Vandiver & Teske 2006). The subjects from one study committed a range of sexually abusive acts against both genders (Fehrenbach & Monastersky 1988). However, many researchers agreed that juvenile females tended to act alone using love, attention and gifts as a strategy to gain trust prior to offending (Fehrenbach & Monastersky 1988; Hunter & Lexier 2003; Taylor 2003; Le Clerc et al. 2008).

Sexual arousal and deviant sexual fantasies occurred prior to offending for juvenile female sex offenders (Tardif et al. 2005, Le Clerc et al. 2008). A significant relationship was determined to exist between deviant sexual fantasies involving the victim before the abuse and the strategies adopted to achieve the fantasy (Le Clerc et al. 2008). Many juvenile female offenders have reported fantasizing about sexual acting-out with younger kids prior to the incidents, with at least two of ten subjects in one study admitting to masturbating to the fantasy (Hunter et al. 1993).

Repetitive patterns of offending with multiple victims suggested psychological disturbances equal in severity to the comparison group of males (Mathews et al. 1997).

Mathews' data showed greater fluidity in arousal and behavior patterns between offenders suggesting that "the offending may be more reflective of experimentation than of fixed paraphilic interests" (Mathews, Hunter & Vuz 1997: 195). However, an early study found that

patterns of perpetration were not repetitive in nature (Fehrenbach & Monastersky 1988). This discrepancy, along with the other conflicting data, emphasizes the need for further research on characteristics of the offense. Based on the literature review, there is a clear consensus on etiology, but still a considerable number of questions regarding perpetration patterns.

A striking contrast between juvenile male and female sexual offenders is in prosecution rates. The girls were more likely to be reported or charged with molestation instead of the harsher charge of rape. The researchers suggested that the type of behavior reported could mean that the girls are less skilled at engaging in offending behaviors. The more probable reason, however, is that people are unwilling to believe that girls can commit more serious offenses (Ray and English 1995).

Empathy and Remorse As previously mentioned, this study examines what, if any, gender differences exist with regards to empathy and remorse between juvenile male and female sex offenders. One study of male and female offender and nonoffender youth found some gender differences with regards to empathy, but it is unclear what offenses were committed by the individuals studied (Bush et al. 2000). The subjects were administered different indices to measure the global concept of empathy and the researchers determined that only one element of empathy, personal distress, showed a gender difference. Personal distress "assesses the personal feelings of anxiety and discomfort that result from observing another's negative experience" (2000:475). Among offender and nonoffender youth, females were found to have higher personal distress scores than males (2000). Girls with behavior problems tend to show less empathy than girls without behavior problems and this deficit is greater among females than males (Cauffman 2008). One specific study of empathy in Sweden found no association between delinquency status and self-reported empathy but did find that girls reported more

mature moral judgments and empathy than males (Larden et al. 2006).

Previous research has shown that adult child molesters display less empathy with their own victims than nonsex offenders and nonoffenders (Marshall, Hamilton and Fernandez 2001); however these questions have rarely been asked of juvenile sex offenders. Juvenile female sex offenders have demonstrated more empathy toward their victims than their male counterparts (Ray & English 1995). However, more recent research found a deficit in the ability of sexually aggressive girls to recognize emotion (Kubik & Hecker 2005). As a result, "sexually aggressive girls may be less likely than their peers to feel empathy for a victim" (2005: 63). The researchers call for further examination of the emotion recognition skills of sexually aggressive girls. With such conflicting results, it is crucial to continue to investigate gender differences in levels of empathy and remorse in juvenile sexual offending.

Subtypes One of the most influential, and frequently cited, studies to date on juvenile female offenders is Mathews, Hunter & Vuz (1997). Their research has maintained a lasting impact because of their creation of a classification system for offenders. Existing typologies of adult male and female offenders have helped clinicians understand perpetration patterns and develop treatment techniques. The preliminary subtypes of juvenile female sexual offenders that emerged from the data include those offenders that engage in a few incidents with a non-related child, those that engage in more extensive offending behavior, and those with even more extensive and repetitive sex offending behavior in addition to other forms of delinquent behavior (Mathews, Hunter and Vuz 1997). The first group showed little individual psychopathology or past maltreatment and described the offending as a result of sexual curiosity. The second subtype included girls whose sexual offending closely mirrored their own prior victimization. Finally, the third group experienced more significant abuse and neglect, including

parental incest, and had a significantly impaired capacity to form normal attachments or experience empathy.

Summary of Literature Review

Although the aforementioned studies are more than a decade old, many are still widely cited in literature on juvenile sexual offending. An updated study with a larger sample size is long overdue. The previous research on juvenile female sex offenders outlined in this review has helped considerably in guiding policy and determining treatment options. However, very little research has been devoted to determining what, if any, relationship exists between gender and characteristics of the offense. In addition, almost no previous work has been dedicated to examining the effect of gender on empathy and remorse in juvenile offenders. Triplett & Myers (1995) called for an exploration of the context of offending by gender, with their own work having shown the importance of such analysis. However, this type of study has yet to occur within the field of juvenile sexual offending. As such, this study aims to fill in these gaps because "neglecting to analyze gender differences in the context of offending causes problems both in developing theory on the causes of crime and delinquency and in understanding gender differences in juvenile justice processing" (1995: 76). The gender differences in the context of offending will be analyzed using both gendered and feminist criminological perspectives.

METHODS

Hypotheses

With this thesis, I seek to determine the effect of gender on offense characteristics in addition to its effect on the offender's ability to feel empathy and/or remorse. The first two hypotheses are based on the gendered perspective as introduced by Steffensmeier & Allan (1996). Their theory posits that female participation in crime should be lowest for those crimes

that diverge most from gender norms. I would argue here that various forms of penetration (vaginal, anal, and forced penetration with foreign objects) clearly diverge from gender norms and as such the data will show that females engage less in penetration than males.

<u>Hypothesis 1:</u> Females will be less likely than males to engage in acts involving penetration.

Gendered socialization leads women to be more sensitive and dependent on the approval of others (Steffensmeier & Allan 1996). Past research has shown that juvenile female sex offenders demonstrate more empathy towards their victims than their male counterparts (Ray & English 1995). The gendered perspective would argue that the need for approval would explain heightened levels of empathy and remorse in females, and that is the lens through which I will examine the data.

<u>Hypothesis 2:</u> Females will be shown to demonstrate more empathy and remorse than male offenders.

The feminist perspective shapes the final hypothesis. Feminist criminology attributes female delinquency to prior sexual victimization (Chesney-Lind & Shelden 1998). Feminist pathways research suggests that childhood trauma is linked with subsequent offending in both boys and girls (Belknap 2001). Previous literature demonstrates that juvenile female sex offenders experienced more childhood sexual abuse than males, but males have experienced some form of abuse (Fromuth & Conn 1997; Mathews, Hunter & Vuz 1997; Vick et al. 2002; Hickey et al. 2008; Johansson & Kempf-Leonard 2009).

Hypothesis 3: Of the control variables, severity of past sexual abuse will be shown to have the greatest effect on sexual offense characteristics and empathy/remorse.

Data

The current study is based on individuals identified through the Assessment for Safe and Appropriate Placement (ASAP) program within the Massachusetts Department of Social Services (DSS) from 1998-2004 (Prentky 2005). The juveniles were so identified because of

their sexually inappropriate and coercive behavior towards other children. The original study was conducted to assist the DSS in identifying risk factors in youth already found to be engaging in sexually coercive behavior. The data set was obtained for this study from the National Archive of Criminal Justice Data at the Inter-University Consortium for Political and Social Research (ICPSR).

Data came from documents collected for the DSS case records and fell into four categories: (1) DSS records, including ASAP evaluation, service plans, abuse investigations and reports, family history, detailed information on parents, siblings and placements, (2) residential and group treatment plans, including progress reports and incident and behavior reports, (3) school reports, including academic and progress reports and psychoeducational evaluations, and (4) therapy, which includes admission and discharge summaries, inpatient and outpatient treatment notes, medication trials and progress reports, and diagnoses.

It is important to note here that the data was coded by a third party that culled the appropriate responses for each question from the aforementioned documents. This increases the risk of coding bias in that the person reviewing the documents might pathologize otherwise normal sexual behaviors due to the subject's label of sex offender. A review of the literature on adolescent sex offenders found that writers tend to conflate "abnormal" or "inappropriate" sexual behavior with "abusive" and "perpetration" behaviors (Okami 1992: 112). Unusual or excessive interest or activity in sexual matters is pathologized, and diagnosed, as "sexualized behavior" in child perpetrators (1992). Okami argues that child sex offender related research pathologizes otherwise normal behavior because of a covert moral crusade against a "sex positive" culture, and widespread moral panics involving the safety of children (1992: 125). Kleinplatz argues that, "diagnostic criteria have been written to pathologize those behaviors our society deems

unacceptable" (2001: 93). Ultimately, anxiety over sexual abuse is "creating unwarranted negative attitudes toward normal physical affection" (Hyson et al. 55). This form of coding bias is unavoidable when using an existing data set that was coded by a third party, and must be kept in mind when reviewing the data.

The data obtained for this study comes from a restricted data set and as such required a signed data protection plan. In accordance with the approved IRB plan, I analyzed the data using SPSS and STATA on a personal laptop running Microsoft XP. The data was analyzed on only one computer that was not attached to a network. Data and output files were stored on a password protected external hard drive instead of the laptop's internal hard drive. When not being used, the external hard drive remained locked in a safe. Data and analyses were never transmitted electronically. All hard copies of output were shredded.

Sample

The sample of 720 juveniles began as a total of 1,300 individual's case records requested for study from 28 DSS area offices in Massachusetts. Of those 1,300 cases, 89 were closed and unattainable, 65 were missing, and 37 were stopped for insurance reasons or due to cancellation by a person of authority. The 1,109 remaining cases were further reduced by the DSS due to missing reports or other undisclosed reasons, leaving a sample of 720 cases. The subjects were comprised of 81.2% (n = 585) boys and 18.8% (n = 135) girls. The majority of subjects were Caucasian (59.6%), with the remaining 40% being African American (11.1%), Hispanic (14.6%), Asian (0.8%) or other (12.9%) (Prentky 2005).

The existing literature is divided on the average age at which juvenile sex offenders begin offending. A number of studies have found that both boys and girls begin offending around 11 or 12 (Fromuth & Conn 1997; Kubik & Hecker 2005; Tardif et al. 2005); however, others have

determined that the average age is under 10, sometimes closer to 6 or 7 (Fehrenbach & Monastersky 1988; Cavanagh Johnson 1989; Gray et al. 1997; Hickey et al. 2008; Letourneau et al. 2008). In the current sample, the mean age at time of first hands on sexual offense is 6.55 for males and 6.9 for females, fitting in with the latter group of articles (Prentky 2005). According to the codebook, first hands on sex offense means that there was nonconsensual physical sexual contact between the subject and the victim, such as touching, fondling, fellatio, or penetration (Prentky 2005: 120).

TABLE 1. Demographic Characteristics (n = 720)

Gender	Number and %	
Male	585 (81.2%)	
Female	135 (18.8%)	

Age at First Hands on	
Sexual Offense	Mean
Male	6.55
Female	6.9

Race	<u> Male - Number</u>	Female - Number
Caucasian	354	75
African-American	62	18
Hispanic	96	9
Asian	5	1
Other	61	32

VARIABLES Dependent Variables

Previous work on this subject has focused on the etiology behind sexually deviant behavior in juvenile males and females, with little attention being paid to the act itself or the level of empathy exhibited by the perpetrator. In an effort to fill that void, this study will utilize two distinct groups of dependent variables. The first set of dependent variables in this study measures the following offense characteristics: penetrative acts and non-penetrative acts. The

second group of dependent variables examines levels of empathy and remorse in offenders.

Offense Characteristics Offense characteristics refers to specific actions that take place during the offense. For this, two variables will be analyzed: penetrative acts, non-penetrative acts. Penetrative acts is an additive scale of three measures: vaginal penetration, anal penetration and forced penetration with foreign objects. All three variables are dichotomous, with the first two being recoded from nominal variables to fit the response categories yes (1) or no (0).

TABLE 2. Dependent Variable Descriptive Statistics

Penetrative Acts	Response Categories	<u>Male</u>	Female
Vaginal Penetration (attempted or	0 – no	406 (79.9%)	98 (82.4%)
completed)	1 - yes	102 (20.1%)	21 (17.6%)
Anal Penetration (attempted or	0 - no	415 (81.7%)	113 (95.0%)
completed)	1 – yes	93 (18.3%)	6 (5.0%)
Forced Penetration			
with Foreign Objects	0 - no	564 (96.4%)	127 (94.1%)
	1 - yes	21 (3.6)	8 (5.9%)
Non-Penetrative Acts	•		
Genital Touching	0-no	167 (28.5%)	29 (21.5%)
	1 – yes	418 (71.5%)	106 (78.5%)
Subject Masturbated			
Victim	0 - no	435 (85.6%)	98 (82.4%)
	1 - yes	73 (14.4%)	21 (17.6%)
Victim Masturbated			
Subject	0-no	448 (88.2%)	103 (86.6%)
	1 - yes	60 (11.8%)	16 (13.4%)
Subject Fellated			
Victim	0 - no	396 (78.0%)	101 (84.9%)
	1 - yes	112 (22.0%)	18 (15.1%)

Victim Fellated			
Subjected	0 - no	388 (76.4%)	111 (93.3%)
	1 – yes	120 (23.6%)	8 (6.7%)
J-SOAP Variables	Response Categories		
	0 - clear evidence of		
Empathy	empathy	68 (11.7%)	17 (12.7%)
	1 - occasional		
	empathy	221 (38.1%)	62 (46.3%)
	2 - no evidence of		
	empathy	291 (50.2%)	55 (41.0%)
	0 - clear evidence of		
Remorse	remorse	77 (13.3%)	17 (12.7%)
	1 - occasional remorse	209 (36.0%)	57 (42.5%)
	2 - no evidence of	. ,	, ,
	remorse	294 (50.7%)	60 (44.8%)

The non-penetrative acts scale includes the variables genital touching, subject masturbated victim, victim masturbated subject, subject fellated victim and victim fellated subject. Each of these is a dichotomous variable, recoded to fit the response categories yes (1) or no (0).

Empathy and Remorse The study examines two variables that were measured based on the Juvenile Sex Offender Assessment Protocol (J-SOAP): empathy and remorse. The J-SOAP is a checklist devised to aid in the review of risk factors associated with sexual and criminal offending in juveniles (Prentky et al. 2000). It was originally designed to assess boys adjudicated for sexual offenses as well as those nonadjudicated youths with a history of sexually coercive behavior.

The empathy variable is intended to assess the extent to which the individual expresses thoughts, feelings and sentiments that reflect empathy of the victim(s) of sexual assaults and/or sexual misconduct. The responses are coded as clear evidence of empathy, some evidence/occasional empathy, and no evidence of empathy. Clear evidence of empathy indicates

that the subject appears to have a genuine capacity for feeling empathy for his/her victim(s) and also demonstrates the ability to generalize the feelings of empathy to other victims. Some evidence of empathy suggests that there is some degree of expressed empathy but the statements appear to be internalized at a strictly intellectual level, or are intended to reflect socially acceptable viewpoints. The latter choice corresponds with evidence of a callous disregard for others or no evidence of empathy.

The variable remorse is measured similarly to empathy and is intended to assess the extent to which the subject expresses thought, feelings and sentiments that reflect remorse for sex offense related behavior. The responses are coded as clear evidence of remorse, some evidence/occasional remorse and no evidence of remorse. Clear evidence indicates that the subject appears to have a genuine remorse for his/her actions and can generalize to other victims. The response is coded as some evidence of remorse if the subject shows some degree of remorse but there are possible egocentric motives such as shame or embarrassment. This also applies to any responses that appear to show internalized remorse at a strictly cognitive level. If there is little or no evidence for remorse, the response is coded as the final option.

Independent Variable

The main focus of this study is to determine the influence of gender on characteristics of the offense and sexually coercive behaviors. Specifically, because of the gap in literature on juvenile female sex offenders, this study seeks to highlight patterns in characteristics of the offense amongst female subjects.

Control Variables

The choice of control variables is based on prior literature, in particular the influential Mathews et al. (1997) study. Mathews et al. (1997) compared the histories of 67 juvenile

females with 70 juvenile males across three parameters: developmental and psychiatric characteristics, history of maltreatment, and sexual perpetration characteristics.

Under psychiatric/developmental characteristics, Mathews et al. (1997) examined the following variables: previous mental health treatment, suicidal ideation/attempt, runaway, alcohol/drug abuse, learning disability, history of sexual abuse, and history of physical abuse. Their choice of variables helped to shape the framework for the current study. As such, this study examines educational characteristics, psychiatric/developmental characteristics, drug/alcohol abuse, and history of maltreatment (physical, psychological and sexual).

Educational characteristics consist of the following variables: special classes, learning disorder and problems in grammar school, junior high and high school. The learning disorder variable is coded as: no evidence of learning disorder; learning disorder suggested in review of file; or clear evidence of official diagnosis. Special classes is a dichotomous variable requiring a yes or no response. Special classes is different from the learning disorder variable in that it intends to look at what, if any, effect being set apart from peers has on the individual. The variable looks at special classes for scholastic, emotional and behavioral problems. Finally, the variable problems in school is an additive scale that collapses three variables: problems in grammar school, problems in junior high, and problems in high school. These variables have the following response categories: no problems, slight (some minor discipline or attendance problems), moderate (seems to be a behavior or attendance problem), or severe (serious discipline and/or attendance problem). According to the codebook, these variables intend to measure "acting out" behaviors (Prentky 2005).

TABLE 3. Control Variable Descriptive Statistics

Educational Characteristics	Response Categories	Male	Female
	240000000000000000000000000000000000000	1110110	2 01110110
Special Classes (SC)	0-no	140 (23.9%)	44 (32.6%)
, ,	1 - yes	445 (76.1%)	91 (67.4%)
	·	Mean	Mean
		0.7607	0.6741
Learning Disorder (LD)	0-no	293 (50.1%)	78 (57.8%)
	1 - yes	292 (49.9%)	57 (42.2%)
		<u>Mean</u>	<u>Mean</u>
		0.4991	0.4222
Ducklama in Cakaal Caala	0	25 (6 00/)	12 (0 (0)
Problems in School Scale	0 - no problems	35 (6.0%)	13 (9.6%)
	1 - slight	127 (21.7%)	42 (31.1%)
	2 – moderate 3 – severe	199 (34%)	35 (25.9%)
	3 – severe	224 (38.3%)	45 (33.4%)
		<u>Mean</u> 4.0051***	<u>Mean</u> 3.1852
		4.0031	3.1832
Psychiatric Characteristics	Response Categories	Male	Female
	<u> </u>		
Juvenile Psychiatric History (JPSY)	0-no	204 (34.9%)	51 (37.8%)
	1 - yes	381 (65.1%)	84 (62.2%)
	- J	,	- ()
	- 7-2	Mean	Mean
	- , -2	` /	` '
Dahawian Digandang Saala	·	<u>Mean</u> 0.6513	<u>Mean</u> 0.6222
Behavior Disorders Scale	0 – no	Mean 0.6513 66 (11.3%)	Mean 0.6222 33 (24.4%)
Behavior Disorders Scale ADD/ADHD/ODD/Conduct	·	Mean 0.6513 66 (11.3%) 519 (88.7%)	Mean 0.6222 33 (24.4%) 102 (75.6%)
	0 – no	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean
	0 – no	Mean 0.6513 66 (11.3%) 519 (88.7%)	Mean 0.6222 33 (24.4%) 102 (75.6%)
ADD/ADHD/ODD/Conduct	0 – no 1 – yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077***	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale	0 – no 1 – yes 0 – no	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%)	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%)
ADD/ADHD/ODD/Conduct	0 – no 1 – yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077***	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale	0 – no 1 – yes 0 – no	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%)	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%)
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%)	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%)
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%)	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%)
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%) Mean	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%) Mean
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%)	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%)
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale Adjustment/Impulse/Mood/Psychotic	0 - no 1 - yes 0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%) Mean 1.5897	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%) Mean 1.6222
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale	0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%) Mean	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%) Mean
ADD/ADHD/ODD/Conduct Anxiety Disorders Scale OCD/Anxiety/PTSD Other Psychiatric Disorders Scale Adjustment/Impulse/Mood/Psychotic	0 - no 1 - yes 0 - no 1 - yes 0 - no 1 - yes	Mean 0.6513 66 (11.3%) 519 (88.7%) Mean 1.9077*** 139 (23.8%) 446 (76.2%) Mean 1.0906 94 (16.1%) 460 (83.9%) Mean 1.5897	Mean 0.6222 33 (24.4%) 102 (75.6%) Mean 1.3481 17 (12.6%) 118 (87.4%) Mean 1.1926 22 (16.3%) 107 (83.7%) Mean 1.6222

	2 - major problems	25 (4.3%) <u>Mean</u> 0.2154	6 (4.4%) <u>Mean</u> 0.2000
Severity of Alcohol Abuse	0 - no alcohol use history	477 (81.5%)	108 (80.0%)
	1 - occasional but no problems associated	50 (8.5%)	10 (7.4%)
	2 - some problemsassociated3 - major problems	51 (8.7%)	13 (9.6%)
	associated	7 (1.2%)	4 (3.0%)
		<u>Mean</u> 0.2957	<u>Mean</u> 0.3556
History of Maltreatment	Response Categories	<u>Male</u>	<u>Female</u>
Severity of Physical Abuse	0 - no documented history of physical abuse	145 (24.8%)	31 (23.0%)
severity of 1 hysical 110 ase	1 - no physical injuries ever sustained	61 (10.4%)	20 (14.8%)
	2 - physical abuse resulted in cuts, bruises and abrasions	96 (16.4%)	19 (14.1%)
	3 - physical abuse resulted in subject being kicked, punched or beat with objects 4 - physical abuse	253 (43.2%)	52 (38.5%)
	resulted in broken bones, or if subj was burned, strangled or rendered unconscious	30 (5.1%)	13 (9.6%)
		<u>Mean</u> 1.9350	<u>Mean</u> 1.9704
Severity of Psychological Abuse	0 - no documented history of psychological abuse	340 (58.1%)	69 (51.1%)
	1 - subject called names or swearing and yelling at subject	76 (13.0%)	20 (14.8%)
	2 - chronic severe criticism and/or saying things that are	41 (7.0%)	14 (10.4%)

	specifically intended to hurt subj 3 - threats and/or saying things that are specifically intended to sare the subject 4 - subject forced to do	71 (12.1%)	19 (14.1%)
	things that were intended to frighten, embarrass or humiliate	57 (9.7%)	13 (9.6%)
	emourtuss of nummace	<u>Mean</u> 1.0239	<u>Mean</u> 1.1630
Severity of Sexual Abuse	0 - no documented history of sexual abuse	302 (51.6%)	45 (33.3%)
	1 - non-contact sexual abuse (peeping, etc) 2 - abuse consisted	14 (2.4%)	2 (1.5%)
	only of fondling, caressing, and touching with no penetration 3 - abuse included	78 (13.3%)	15 (11.1%)
	genital focus with rubbing or masturbating but no penetration or oral sex 4 - abuse included anal	47 (8.0%)	13 (9.6%)
	or vaginal penetration with finger, mouth or penis 5 - abuse included	123 (21.0%)	48 (35.6%)
	aggressive penetration, including use of foreign objects resulting in severe physical injuries 6 - abuse included sadistic elements, use of urine or feces,	6 (1.0%)	7 (5.2%)
	humiliating, degrading or demeaning acts, forced oral sex after anal penetration, or multiple perps at same time	15 (2.6%)	5 (3.7%)

Mean	Mean
1.5778***	2.4296

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

When examining psychiatric and developmental characteristics, Mathews et al. (1997) simply looked at whether or not the subject had previous mental health treatment. Due to the richness of the data set I am using, this study includes more variables that describe the subject's psychiatric history in greater detail. The first is a simple dichotomous variable, juvenile psychiatric history, determining if the subject has a psychiatric history. Based on the Diagnostic and Statistical Manual of Mental Diseases (DSM-IV) (1994), the remaining variables are classified as follows: behavior disorders, anxiety disorders, adjustment disorders, impulse disorders, mood disorders, and psychotic disorders. Behavior disorders include attention-deficit disorder (ADD), attention-deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and conduct disorder. Anxiety disorders include obsessive-compulsive disorder, generalized anxiety disorder, and post-traumatic stress disorder (PTSD). Adjustment, impulse, mood and psychotic disorders are each only one variable of the same names. All of these variables are dichotomous, coded as either yes or no.

According to the DSM-IV (1994), ADD/ADHD, a behavior disorder, is defined as a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development. ODD is defined as recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least 6 months and is characterized by the frequent occurrence of at least four of the following behaviors: losing temper, arguing with adults, actively defying or

refusing to comply with the requests or rules of adults, deliberately doing things that will annoy other people, blaming others for his or her own mistakes or misbehavior, being touchy or easily annoyed by others, being angry and resentful, or being spiteful or vindictive. Conduct disorder is described as repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated. The defining characteristics of OCD are recurrent obsessions or compulsions that are severe enough to be time consuming or cause marked distress or significant impairment.

In the past, there has been some concern regarding the medicalization of behaviors. The problem lies in the creation and definition of the categories (Conrad 1992). Medicalization defines a "problems" in medical terms and adopts a medical framework to understand and treat it. Hyperactivity originally applied only to overactive, highly distractible children (especially boys), but now as ADD/ADHD it has become more inclusive (1992). Because of the nebulous nature of the disorder, labeling and treatment have been increasing (1992). It should be noted that for this thesis the disorders are included as a way to distinguish between individuals who demonstrate varying levels of the given behaviors.

Under the category of Anxiety Disorders, generalized anxiety disorder is defined as excessive anxiety and worry, occurring more days than not for a period of at least 6 months, about a number of events or activities. PTSD is defined as development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate. The

person's response must involve intense fear, helplessness, or horror. Characteristic symptoms include persistent re-experiencing of the traumatic event, persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness, and persistent symptoms of increased arousal.

Regarding the remaining psychiatric variables, adjustment disorder is described as the development of clinically significant emotional or behavioral symptoms in response to an identifiable psychosocial stressor or stressors. Impulse disorder is the failure to resist an impulse, drive, or temptation to perform an act that is harmful to the person or to others (eg: kleptomania, pyromania, pathological gambling). Mood disorders include bipolar disorder and major depressive disorder, with the predominant feature of such disorders being a disturbance in mood. Finally, psychotic disorder includes delusions or hallucinations as major symptoms (eg: schizophrenia).

In order to examine drug and alcohol abuse, the variables severity of drug abuse and severity of alcohol abuse will be analyzed. The variables are continuous with the responses for the drug variable coded as no problems associated with abuse, some problems associated, and major problems associated. Severity of alcohol abuse has an additional response category and is organized as follows: no alcohol use history, occasional but no problems associated, some problems associated, major problems associated.

History of maltreatment consists of variables that measure the severity of physical, psychological and sexual abuse. Severity of abuse is measured with response categories that are unique to each of the three forms of abuse. The responses for severity of physical abuse are coded as follows: no documented history of physical abuse, no physical injuries ever sustained; physical abuse resulted in cuts, bruises and abrasions; physical abuse resulted in subject being

kicked, punched or beat with objects; or physical abuse resulted in broken bones, or if subject was burned, strangled or rendered unconscious. For severity of psychological abuse, the responses are coded as follows: no documented history of psychological abuse, subject called names or swearing and yelling at subject; chronic severe criticism and/or saying things that are specifically intended to hurt the subject; threats and/or saying things that are specifically intended to scare the subject; or subject forced to do things that were intended to frighten, embarrass or humiliate. The variable severity of sexual abuse contained the following response categories: no documented history of sexual abuse, non-contact sexual abuse (peeping, voyeurism, etc.); abuse consisted only of fondling, caressing, and touching with no penetration; abuse included genital focus with rubbing or masturbating but no penetration or oral sex; abuse included anal or vaginal penetration with finger, mouth or penis; abuse included aggressive penetration, including use of foreign objects resulting in severe physical injuries; or abuse included sadistic elements, use of urine or feces, humiliating, degrading or demeaning acts, forced oral sex after anal penetration, or multiple perpetrators at the same time.

ANALYTICAL TECHNIQUE

This study seeks to improve on some of the shortcomings of the Mathews, Hunter and Vuz (1997) study. In Mathews et al. (1997), the males and females came from separate samples, preventing a direct statistical comparison. The other limitation is that the researchers conducted only a bivariate analysis. The large sample size of the current study allows the use of multivariate analyses to examine gender as the primary predictor of characteristics of the offense, while controlling for other factors. Including controls allows for the demonstration that the observed effect of gender is the result of the subject's gender and not because of other confounding variables.

I use ordered logistic regression. Similar to Ordinary Least Squares (OLS) linear regression, it assesses the relationships among two or more independent variables and their correlation with a dependent variable that is dichotomous (Nardi 2006). Ordered logistic regression takes it a step further and allows for the ordinal dependent variable to have more than two response categories. As previously mentioned, the dependent variables are divided into the following groups: penetrative acts, non-penetrative acts, empathy and remorse. The first two variables are additive scales of dichotomous responses. Empathy and remorse are individual ordinal variables with three response categories each. The control variables include some dichotomous variables but also include variables with up to six response categories, making ordered logistic regression especially necessary.

The variables were created using qualitative data that take values in a limited set of categories (McCullagh 1980: 109). Because the distances between these categories are unknown when dealing with ordinal variables, the ordered logit regression model will be used to predict that a category within a dependent variable is a function of the independent variables and a set of cutpoints (τ) (Long 1997). The model calculates the probability of an outcome falling within the cutpoint range. The mathematical expression representing this model is as follows (McCullagh 1980; Brant 1990):

$$logit(\gamma_j) = log[\gamma_j / (1 - \gamma_j)] = \tau_j - \beta^t x$$

where the *p*-vector β and $\tau_1 < \tau_2 < \ldots < \tau_{k-1}$ represent unknown parameters.

RESULTS

Before running the regression models, I ran independent samples T-tests to compare the means for boys and girls for the control variables. Going back to table 3, there are significant gender differences for the variables problems in school, behavior disorder diagnosis, and severity

of sexual abuse. Regarding problems in school, there is a significant difference in the scores for males (M=4.0051, SD=2.4) and females (3.1852, SD=2.4); t(718) = 3.74, p = 0.000. These results suggest that males had a higher score on all of the constituent variables, meaning that they displayed more problem behavior in school than females.

The t-test results for the behavior disorder diagnosis scale show that there is a significant difference in the scores for males (M=1.9077, SD=1.01) and females (M=1.3481, SD=0.97); t(718) = 5.837, p = 0.000. This suggests that males are diagnosed with more behavior disorders than females.

Finally, the results of the t-test for severity of sexual abuse show that there is a significant difference in the scores for males (M=1.5778, SD=1.8) and females (M=2.4296, SD=1.9); t(718) = -4.824, p = 0.000. This suggests that females have experienced more severe prior sexual victimization than their male counterparts.

Effect of Gender on Offense Characteristics

As stated previously, I used ordered logistic regression to determine the effect of gender on offense characteristics with five models for each dependent variable. In the first model, the dependent variable is regressed only on gender. The second model adds educational characteristics to the baseline model: enrollment in special classes, presence of a learning disorder, and documented problems in school. The third model adds to the previous two models the psychiatric characteristics including diagnosed juvenile psychiatric disorder, behavior disorder, anxiety disorder, and other psychiatric disorders. The fourth model adds to the previous three the severity of drug and alcohol abuse. And finally, the fifth model adds to the previous four the history the severity of physical, psychological, and sexual abuse. The results of these analyses are presented in Tables 4-7.

Penetrative Acts Scale (Table 4)

The first dependent variable, Penetrative Acts Scale, was regressed to determine whether or not girls are less likely to engage in penetrative acts than boys. The results show that gender exhibits a significant effect on the variable in the first model. As ordered logistic regression does not allow for the direct interpretation of variable coefficients, I calculated the y*-standardized coefficients (B^{Sy*}) (Long 1997). Holding other variables constant, the y*-standardized coefficient shows the effect of a change in the independent variable on the dependent variable in standard deviations (1997). In this case, with males coded as 0 and females coded as 1, the results show that being female decreases the likelihood of engaging in vaginal, anal or forced penetration during a sex offense by 0.2959 standard deviations. Gender loses its significance between the first and second models, with the second model showing only problems in school as having a significant effect on penetration. For this variable, the y*-standardized coefficient is positive, suggesting that a one-unit increase in problems in school increases the likelihood of engaging in penetration by 0.0583 standard deviations. This suggests that what originally appeared to be a gender effect is actually because of gender differences in problem behavior.

In the third model, gender regains its significance and again indicates, through the y*standardized coefficient, that being female decreases the likelihood of penetration by 0.2721
standard deviations. As for the control variables, both problems in school and anxiety disorder
scale are significant. A one-unit increase in problems in school increases the chance of engaging
in penetration by 0.0547 standard deviations. In addition, being diagnosed for an anxiety
disorder increases the likelihood of penetration by 0.1431 standard deviations. The same
variables, gender, problems in school scale, and anxiety disorder scale, all remain significant in
the fourth model.

The fifth model shows that controlling for all other variables, gender has a significant effect on penetration in a sexual offense. Problems in school also remains significant, though the presence of an anxiety disorder is no longer significant when controlling for physical, psychological, and sexual abuse severity. Severity of psychological and sexual abuse both have a significant effect on penetration. More extensive and severe psychological abuse increases the likelihood of penetration as does experiencing more severe and violent sexual abuse. A one-unit change in each of the previous variables increases the chance of penetration by 0.0753 and 0.0936 standard deviations, respectively.

Within ordered logistic regression, there is an "implicit assumption about the structure of the probability curves that are generated by the model" which is referred to as the parallel regression assumption (Long 1997: 116). The assumption is that the slopes of the coefficients are parallel at specific cutpoints (Long 1997). Also known as the proportional odds model, this was developed for the social and biological sciences by McCullagh (1980). The proportional odds model posits that the "difference between corresponding cumulative logits is independent of the category involved" (McCullagh 1980: 110). In order to test this, and validate the use of the ordered logit model, I used the Brant chi-square test of parallel regression assumption (Brant 1990). A significant return means that the slopes of the coefficients were not parallel and

TABLE 4. Penetrative $(n=627)$	2005 55 0020									
(n -021)	Model 1		11 <u>Model 2</u>		Model 3		Model 4		Model 5	
	В	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}
Gender	-0.545*	-0.2959	-0.46251	-0.2507	-0.50651*	-0.2721	-0.5019*	-0.2696	-0.66333*	-0.3476
	(0.2368)		(0.2403)		(0.2479)		(0.2487)		(0.2568)	
Special Classes			-0.13054	-0.0708	-0.24345	-0.1308	-0.24138	-0.1297	-0.32278	-0.1691
			(0.2215)		(0.2300)		(0.2281)		(0.2316)	
Learning Disorder			-0.11552	-0.0626	-0.17693	-0.0951	-0.17428	-0.0936	-0.15408	-0.0807
			(0.1907)		(0.1948)		(0.1952)		(0.1984)	
Problems in School			0.10750**	0.0502	0.10105**	0.05.47	0.10100*	0.0542	0.1061*	0.0556
Scale			0.10758**	0.0583	0.10185**	0.0547	0.10100*	0.0543	0.1061*	0.0556
Torressile Describingsin			(0.0359)		(0.0388)		(0.0412)		(0.0419)	
Juvenile Psychiatric Disorder					0.13429	0.0722	0.13349	0.0717	0.15255	0.0799
Disorder					(0.13429	0.0722	(0.1988)	0.0717	(0.2018)	0.0799
Behavior Disorder					(0.1907)		(0.1700)		(0.2016)	
Scale					0.02003	0.0108	0.02362	0.0127	0.02917	0.0153
Scarc					(0.1069)	0.0100	(0.1074)	0.0127	(0.1093)	0.0133
Anxiety Disorder					(0.1005)		(6.107.)		(6.10,2)	
Scale					0.26637*	0.1431	0.26861*	0.1443	0.16178	0.0848
					(0.1216)		(0.1228)		(0.1266)	
Other Psychiatric										
Disorder Scale					0.01728	0.0093	0.01664	0.0089	0.02799	0.0147
					(0.0920)		(0.0922)		(0.0941)	
Severity of Drug										
Abuse							0.08404	0.0451	0.02757	0.0144
							(0.2167)		(0.2225)	
Severity of Alcohol										
Abuse							-0.05247	-0.0282	-0.05992	-0.0314
C							(0.1660)		(0.1689)	
Severity of Physical									0.05699	0.0200
Abuse									-0.05688 (0.0694)	-0.0298
Severity of Psychiatric									(0.0694)	
Abuse									0.14365*	0.0753
House									(0.0633)	0.0755
Severity of Sexual									(0.0055)	
Abuse									0.17852***	0.0936
									(0.0493)	,
τ_1	0.6799		0.9690		1.2827		1.2935		1.5288	
$ au_2$	2.4291		2.7362		3.0652		3.0763		3.3575	
$ au_3$	4.7417		5.0525		5.3881		5.3987		5.7021	
Log likelihood	-512.6871		-507.9649		-504.1685		-504.0879		-493.0582	
McFadden's R ²	0.005		0.015		0.022		0.022		0.043	
Brant chi-square	3.72		11.82		16.95		19.35		26.49	
							., 0		/	

therefore an ordered logit model is inappropriate. In all five models the Brant chi-square statistic was non-significant, thereby validating the use of the ordered logit model.

As ordered logistic regression does not have an equivalent to the R^2 found in ordinary least squares regression, pseudo R^2 s must be used to explain variance. In this case, I used McFadden's R^2 to determine that the first model explains less than 1% in the variance of penetrative acts ($R^2 = 0.005$). The percentage of variance explained increases through the models with model 5 explaining almost 4.4% of the variance ($R^2 = 0.044$). Though the numbers increase with each model, these are still small values for R^2 .

Because gender remains significant in the fifth model, I ran the model again separately for males and females in order to determine if the same variables are statistically significant for both groups (table 5). For boys, problems in school and severity of sexual abuse have a significant effect on penetrative acts. A one-unit increase in problems in school increases the likelihood of penetration by 0.0549 standard deviations. In addition, more extensive sexual abuse increases the likelihood of penetration by 0.1023 standard deviations. For females, only severity of psychological abuse has a significant effect on penetration. More severe and extensive psychological abuse increases the likelihood of penetration by 0.2033 standard deviations.

	Boys (n	Boys (n = 508)		i = 134)	
	ß	B^{Sy^*}	В	β^{Sy*}	
Superial Change	0.42401	-0.2287	0.20127	0.0000	
Special Classes	-0.43401 (0.2533)	-0.2287	0.20137 (0.6170)	0.0989	
Learning Disorder	-0.21139	-0.1114	0.10463	0.0514	
Learning Disorder	(0.2138)	-0.1114	(0.5632)	0.0314	
Problems in School Scale	0.10419*	0.0549	0.18659	0.0917	
1 Tobletis in School Scale	(0.042)	0.0349	(0.1276)	0.0917	
Juvenile Psychiatric Disorder	0.11959	0.0630	0.24384	0.1198	
savenne i syematile Disorder	(0.2190)	0.0050	(0.5793)	0.1170	
Behavior Disorder Scale	-0.01329	-0.0070	0.07593	0.0373	
Benavior Bisorder Sease	(0.1185)	0.0070	(0.3185)	0.0373	
Anxiety Disorder Scale	0.26132	0.1377	-0.40439	-0.1987	
	(0.1364)		(0.4276)	0127 01	
Other Psychiatric Disorder Scale	0.01582	0.0083	0.13011	0.0639	
·	(0.1020)		(0.2687)		
Severity of Drug Abuse	-0.12198	-0.0643	0.88130	0.4330	
·	(0.2418)		(0.6456)		
Severity of Alcohol Abuse	0.01098	0.0058	-0.57413	-0.2821	
	(0.1840)		(0.4876)		
Severity of Physical Abuse	-0.04435	-0.0234	-0.11239	-0.0552	
	(0.0764)		(0.1855)		
Severity of Psychiatric Abuse	0.09245	0.0487	0.41382*	0.2033	
	(0.0690)		(0.1798)		
Severity of Sexual Abuse	0.19418***	0.1023	0.12499	0.0614	
	(0.0537)		(0.1425)		
τ_1	1.3691		2.7088		
τ_2	3.2078		4.6818		
τ ₃	5.9377		5.9090		
Log likelihood	-412.2017		-73.1652		
<i>Note.</i> Numbers in parentheses are standard	errors.				
*p < .05. **p < .01. ***p < .001.					

Non-Penetrative Acts Scale (Table 6)

In each of the five models, gender does not have a significant effect on the dependent variable. In model 2, no variables exhibit significant effects on non-penetrative acts. Model 3 shows that a diagnosis of a behavior disorder or anxiety disorder increases the likelihood of engaging in genital touching, masturbation, or fellatio in a sexual offense by 0.1217 and 0.1615

standard deviations, respectively. Both of these variables remain significant in the fourth model, with only the presence of a behavior disorder remaining significant in the fifth model. In addition, the fifth model shows that severity of sexual abuse is significant. A one-unit change in sexual abuse severity increases the likelihood for engaging in non-penetrative acts during a sexual offense by 0.0917 standard deviations. The significance of the sexual abuse variable does provide support for my third hypothesis.

The Brant chi-square statistics were non-significant for each model, thereby justifying the ordered logit approach. In addition, the first two models explain none of the variance of non-penetrative acts ($R^2 = 0.000$ for both) with the variance explained increasing to almost 3% by the fifth model ($R^2 = 0.027$).

n = 627)										
	Mod		Mod		Mod		Mod		Mod	
	ß	β^{Sy*}	ß	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}	ß	β^{Sy*}
~ .			0.000							
Gender	0.00425	0.0023	-0.00953	-0.0053	0.06569	0.0355	0.04896	0.0264	-0.07781	-0.041
1 1 01	(0.1813)		(0.1841)	0.0262	(0.1913)	0.0710	(0.1921)	0.0721	(0.1964)	0.105
Special Classes			0.06583	0.0363	-0.13165	-0.0712	-0.13352	-0.0721	-0.2002	-0.1059
			(0.1926)	0.0440	(0.1976)	0.1005	(0.1977)	0.106	(0.1989)	0.100
earning Disorder			-0.08122	-0.0448	-0.18949	-0.1025	-0.19636	-0.106	-0.19071	-0.1008
			(0.1637)		(0.1669)		(0.1671)		(0.1683)	
Problems in School Scale			-0.01577	-0.0087	-0.04962	-0.0268	-0.05404	-0.0292	-0.06423	-0.034
			(0.0307)		(0.0333)		(0.0354)		(0.0357)	
uvenile Psychiatric			(111111)		(312227)		(11111)		(11111)	
Disorder					0.26016	0.1407	0.26148	0.1412	0.24925	0.1318
					(0.1687)		(0.1686)		(0.1695)	
Behavior Disorder Scale					0.22497*	0.1217	0.22199*	0.1199	0.25228**	0.1334
					(0.0905)		(0.0906)		(0.0914)	
Anxiety Disorder Scale					0.29867**	0.1615	0.30279**	0.1635	0.20491	0.1084
					(0.1039)		(0.1052)		(0.1075)	
Other Psychiatric										
Disorder Scale					-0.07987	-0.0432	-0.07983	-0.0431	-0.06722	-0.0355
					(0.0795)		(0.0796)		(0.0803)	
Severity of Drug Abuse							-0.20665	-0.1116	-0.21031	-0.1112
							(0.1976)		(0.1985)	
Severity of Alcohol										
Abuse							0.18745	0.1012	0.17775	0.094
							(0.1458)		(0.1462)	
Severity of Physical									0.04040	0.000.4
Abuse									0.04240	0.0224
1									(0.0591)	
Severity of Psychiatric									0.00075	0.0460
Abuse									0.08875	0.0469
									(0.0562)	
Severity of Sexual Abuse									0.17358***	0.0917
seventy of Sexual Abuse									(0.0420)	0.0917
									(0.0420)	
·1	-1.2366		-1.2923		-0.8628		-0.8799		-0.5952	
2	0.7447		0.6908		1.1753		1.1615		1.5035	
	1.4943		1.4410		1.9441		1.9321		2.2903	
3	2.3832		2.3300		2.8472		2.8372		3.2129	
4										
5	2.7417		2.6885		3.2090		3.1995		3.5823	
og likelihood	-913.1240		-912.8728		-901.4276		-900.5463		-887.8341	
McFadden's R ²	0.000		0.000		0.013		0.014		0.028	
Brant chi-square	7.73		20.39		38.04		44.34		55.94	

Empathy (Table 7)

The variable empathy was regressed in order to determine if girls were more empathic than males. The results do not support my hypothesis; gender does not have a significant effect on empathy across all models. Problems in school has a significant effect on empathy in the second model. Because of the way both empathy and remorse are coded, the results show that as problems in school increase, evidence of empathy decreases. In model 3, only behavior disorder has a significant effect on empathy. The presence of a behavior disorder decreases the likelihood of empathic feelings by 0.1463 standard deviations. Behavior disorder is the only variable that remains significant in the remaining models for empathy. In the fourth model, a diagnosis of a behavior disorder decreases the likelihood for empathic feelings by 0.1394 standard deviations. And finally, controlling for all other variables, in the fifth model the diagnosis of a behavior disorder decreases the likelihood for feeling empathy by 0.1332 standard deviations. There was no evidence to support my third hypothesis, as severity of sexual abuse was non-significant in the fifth model.

The Brant chi-square test shows non-significant results for all models for both empathy and remorse, thereby validating the ordered logit model. For empathy, the first model explains less than 1% in the variance ($R^2 = 0.002$) with almost 3% in variance explained by the fifth model ($R^2 = 0.026$).

Special Classes	TABLE 7. Empathy										
B 6 ^{85*} B B B B B B B B B	(n=627)										
Cender								Mod		Mod	
Special Classes		В	β^{Sy*}	ß	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}	ß	B^{Sy*}
Special Classes	Condor	0.2026	0.167	0.22402	0.1224	0.11162	0.0602	0.1145	0.0504	0.09271	-0.0448
Special Classes	Gender		-0.107		-0.1224		-0.0002		-0.0394		-0.0446
(0.1874)	Snecial Classes	(0.1601)			0.1674		0.1528		0.1486		0.1603
Learning Disorder	Special Classes				0.1071		0.1320		0.1 100		0.1003
College	Learning Disorder				-0.0399		-0.0792		-0.0813		-0.0916
Problems in School Scale	<i>B</i>										
Company Comp	Problems in School			, ,		, ,		, í		ĺ	
Juvenile Psychiatric Disorder -0.20231 -0.1092 -0.20944 -0.1129 -0.21467	Scale			0.08978**	0.0489	0.05462	0.0295	0.07411*	0.0399	0.0737	0.0395
Disorder				(0.0314)		(0.0340)		(0.0362)		(0.0363)	
Content Cont	•										
Behavior Disorder Scale	Disorder						-0.1092		-0.1129		-0.115
Scale 0.27104** 0.1463 0.25915** 0.1394 0.24876** (0.0888) (0.0892) (0.0897) Anxiety Disorder Scale -0.05094 -0.0275 -0.07389 -0.0397 -0.03522 (0.1052) Other Psychiatric Disorder Scale 0.000736 0.004 0.01500 0.0081 0.01864 (0.0776) (0.0780) (0.0788) Severity of Drug Abuse -0.31203 -0.1678 -0.30674 (0.1919) (0.1929) Severity of Alcohol Abuse -0.01342 0.0072 0.00047 (0.1411) (0.1413) Severity of Physical Abuse -0.000479 (0.0788) -0.00047 (0.0788) Severity of Psychiatric Abuse -0.000479 (0.0583) -0.00047 (0.						(0.1655)		(0.1659)		(0.1665)	
Anxiety Disorder Scale -0.05094 -0.0275 -0.07389 -0.0397 -0.03522 (0.1016) (0.1028) (0.1052) Other Psychiatric Disorder Scale 0.00736 0.004 0.01500 0.0081 0.01864 (0.0776) (0.0780) (0.0780) (0.0788) Severity of Drug Abuse -0.31203 -0.1678 -0.30674 (0.1919) (0.1929) Severity of Alcohol Abuse 0.01342 0.0072 0.00047 (0.1411) (0.1413) Severity of Physical Abuse -0.00479 -0.00479 Severity of Psychiatric Abuse -0.10516 (0.0583) Severity of Sexual Abuse -1.5305 -1.4052 -1.4337 -1.6082 \[\tau_1 \] -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 \[\tau_2 \] 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -6885.2293 -679.9733 -678.0748 -675.2641 McFadden's R² 0.002 0.012 0.019 0.022 0.026										0.045=	
Anxiety Disorder Scale	Scale						0.1463		0.1394		0.1332
Scale	A '					(0.0888)		(0.0892)		(0.0897)	
Other Psychiatric Disorder Scale O.00736 O.004 O.01500 O.0081 O.0084 O.00786 O.00776 O.00780 O.0081 O.01864 O.00776 O.00780 O.00780 O.0081 O.01864 O.00780 O.00780 O.00788 Severity of Drug Abuse O.01342 O.0072 O.00047 O.1411) O.01413 Severity of Physical Abuse O.01342 O.0072 O.00047 O.1411) Severity of Physical Abuse O.00479 O.00479 O.00479 O.00583 Severity of Sexual Abuse O.00479 O.0047	-					0.05004	0.0275	0.07290	0.0207	0.02522	-0.0189
Other Psychiatric Disorder Scale	Scale						-0.0273		-0.0397		-0.0165
Disorder Scale 0.00736 0.004 0.01500 0.0081 0.01864 (0.0776) (0.0780) (0.0788) Severity of Drug Abuse -0.31203 -0.1678 -0.30674 (0.1919) (0.1929) Severity of Alcohol Abuse -0.01342 0.0072 0.00047 (0.1411) (0.1413) Severity of Physical Abuse -0.00479 (0.0583) Severity of Physical Abuse -0.00479 (0.0583) Severity of Sexual Abuse -0.00479 (0.0543) Severity of Sexual Abuse -0.00184 (0.0415) Ti	Other Psychiatric					(0.1010)		(0.1028)		(0.1032)	
Severity of Drug Abuse	•					0.00736	0.004	0.01500	0.0081	0.01864	0.0100
Severity of Drug Abuse -0.31203 -0.1678 -0.30674 (0.1919) (0.1929) Severity of Alcohol Abuse -0.00047 Severity of Physical Abuse -0.00479 Severity of Physical Abuse -0.00479 Severity of Physical Abuse -0.00479 Severity of Psychiatric Abuse -0.10516 (0.0583) Severity of Sexual Abuse -0.03184 -0.0318	Disorder Beare						0.004		0.0001		0.0100
Abuse	Severity of Drug					(0.0770)		(0.0700)		(0.0700)	
Severity of Alcohol Abuse 0.01342 0.0072 0.00047 (0.1413) (0.1413) (0.1413) (0.1413) (0.1414) (0.1413) (0.1413) (0.00479 (0.00479 (0.00583) (0.0415) (0.0415) (1.4377 -1.6082 (1.4377 -1.6082 (1.4377 -1.6082 (1.4377 -1.6082 (1.4378 -678.0748 -675.2641 (1.4378 -678.0748 -675.2641 (1.4378 -678.0748 -675.2641 (1.4378 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -675.2641 (1.4388 -678.0748 -678.0748 -678.0748 -675.2641 (1.4388 -678.0748 -678.0748 -678.0748 -678.0748 -678.0748 (1.4388 -678.074								-0.31203	-0.1678	-0.30674	-0.1643
Abuse 0.01342 0.0072 0.00047 (0.1413) Severity of Physical Abuse -0.00479 (0.0583) Severity of Psychiatric Abuse -0.10516 (0.0543) Severity of Sexual Abuse -0.03184 (0.0415) T1 -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 (0.0415) T2 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -685.2293 -679.9733 -678.0748 -675.2641 McFadden's R² 0.002 0.012 0.019 0.022 0.026								(0.1919)		(0.1929)	
Severity of Physical Abuse -0.00479 Severity of Physical (0.1411) (0.1413) Severity of Physical (0.0583) Severity of Psychiatric Abuse -0.10516 Severity of Sexual Abuse -0.03184 Abuse -0.03184 T ₁ -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 T ₂ 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -685.2293 -679.9733 -678.0748 -675.2641 McFadden's R ² 0.002 0.012 0.019 0.022 0.026	Severity of Alcohol										
Severity of Physical Abuse -0.00479 Severity of Physical (0.0583) Severity of Psychiatric Abuse -0.10516 Severity of Sexual Abuse -0.03184 Abuse -0.03184 Abuse -1.5305 -1.4052 -1.4337 -1.6082 T ₁ -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 T ₂ 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -685.2293 -679.9733 -678.0748 -675.2641 McFadden's R ² 0.002 0.012 0.019 0.022 0.026	Abuse							0.01342	0.0072	0.00047	0.0002
Abuse								(0.1411)		(0.1413)	
Severity of Psychiatric Abuse -0.10516 Severity of Sexual Abuse -0.03184 Abuse -0.03184 T ₁ -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 T ₂ 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -685.2293 -679.9733 -678.0748 -675.2641 McFadden's R ² 0.002 0.012 0.019 0.022 0.026	•										
Severity of Psychiatric Abuse -0.10516 Psychiatric Abuse -0.0543 Severity of Sexual Abuse -0.03184 T1 -2.0654 -1.5305 -1.4052 -1.4337 -1.6082 T2 0.0038 0.5665 0.7141 0.6835 0.5309 Log likelihood -692.0413 -685.2293 -679.9733 -678.0748 -675.2641 McFadden's R ² 0.002 0.012 0.019 0.022 0.026	Abuse										-0.0026
Psychiatric Abuse	~									(0.0583)	
Severity of Sexual Abuse $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-									0.10516	0.1404
Severity of Sexual Abuse $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Psychiatric Abuse										-0.1494
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McFadden's R^2 0.002 0.012 0.019 0.022 0.026											
1100											
		217 =									

TABLE 8. Remorse										
(n =627)										
	Mod		<u>Mod</u>		Mod		Mod		Mod	
	В	B^{Sy*}	В	B^{Sy*}	В	β^{Sy*}	В	β^{Sy*}	В	β^{Sy*}
Gender	-0.17167	-0.0946	-0.09921	-0.0542	0.03916	0.0211	0.04363	0.0235	0.0886	0.0473
	(0.1799)		(0.1825)		(0.1879)		(0.1885)		(0.1928)	
Special Classes	Ì		0.09545	0.0521	0.05587	0.0302	0.04537	0.0244	0.07326	0.0391
•			(0.1875)		(0.1920)		(0.1926)		(0.1933)	
Learning Disorder			0.03159	0.0173	-0.05951	-0.0321	-0.06159	-0.0331	-0.08339	-0.0440
8			(0.1597)		(0.1639)		(0.1644)		(0.1655)	
D 11 ' 01 10 1			0.00047**	0.0505	0.04022	0.0266	0.07270*	0.0202	0.07250*	0.0200
Problems in School Scale			0.09247**	0.0505	0.04933	0.0266	0.07278*	0.0392	0.07258*	0.0388
T 11 TO 11			(0.0312)		(0.0338)		(0.0361)		(0.0363)	
Juvenile Psychiatric					0.40500	0.4000	0.404.50	0.4004	0.40=0.5	0.40=
Disorder					-0.18508	-0.1000	-0.19168	-0.1031	-0.19786	-0.1057
					(0.1652)		(0.1657)		(0.1664)	
Behavior Disorder Scale					0.32375***	0.1748	0.31109**	0.1673	0.30115**	0.1609
					(0.0890)		(0.0895)		(0.0901)	
Anxiety Disorder Scale					-0.05969	-0.0322	-0.08721	-0.0469	-0.03606	-0.0193
					(0.1010)		(0.1023)		(0.1049)	
Other Psychiatric										
Disorder Scale					0.00958	0.0052	0.01672	0.009	0.0183	0.0098
					(0.0780)		(0.0783)		(0.0793)	
Severity of Drug Abuse							-0.31655	-0.1703	-0.30413	-0.1625
							(0.1941)		(0.1951)	
Severity of Alcohol										
Abuse							-0.02361	-0.0127	-0.04039	-0.0216
							(0.1417)		(0.1422)	
Severity of Physical										
Abuse									-0.00806	-0.0046
									(0.0583)	
Severity of Psychiatric										
Abuse									-0.11534*	-0.0616
									(0.0540)	
									0.05005	0.000
Severity of Sexual Abuse									-0.06086	-0.0325
									(0.0416)	
$ au_1$	-1.9212		-1.4804		-1.3092		-1.3524		-1.5568	
τ_2	-0.0162		0.4450		0.6459		0.6118		0.4267	
Log likelihood	-701.1466		-695.8470		-688.4844		-686.115		-681.5594	
McFadden's R^2	0.001		0.008		0.019		0.022		0.029	
Brant chi-square	1.04		4.80		5.50		12.33		17.19	
<i>Note</i> . Numbers in parenth	eses are stor	ndard error	·c							
* $p < .05$. ** $p < .01$. *** p		nuaru emor	٥.		+		+		+	

Remorse (Table 8)

Like the previous variable, remorse was regressed to test the hypothesis that girls are more remorseful than males. And as with empathy, gender does not have a significant effect on remorse across all five models. In the second model, problems in school has a significant effect on remorse, with a one-unit change in problems in school decreasing the likelihood for feeling remorse by 0.0505 standard deviations. With the introduction of the psychological disorder variables, problems in school lose their significance. Instead, in the third model only the presence of a behavior disorder has a significant effect on remorse. The diagnosis of a behavior disorder decreases the likelihood for remorse by 0.1748 standard deviations. The behavior disorder variable maintains its significance through the rest of the models. Problems in school regains its significance in the fourth and fifth models, with a one-unit change in the variable decreasing the likelihood for remorse by 0.1673 standard deviations in the fourth model, and 0.1609 in the fifth. And finally, controlling for all other variables, severity of psychiatric abuse has a significant effect on remorse in the fifth model. Contrary to the previous variables, a oneunit increase in the severity of psychiatric abuse increases the likelihood for remorse by 0.0616 standard deviations. This does not support my hypothesis in that severity of sexual abuse was non-significant when controlling for all other variables.

The Brant chi-square test shows non-significant results for all five models, thereby validating the use of ordered logistic regression. As for variance, remorse follows the same pattern as empathy with model 1 explaining less than 1% ($R^2 = 0.001$) and the fifth model explaining almost 3% ($R^2 = 0.029$).

DISCUSSION AND CONCLUSIONS

Based on the literature, I hypothesized that gender would have a significant impact on penetrative acts, empathy, and remorse. Previous research found that males are more likely to penetrate their victims (Hickey et al. 2008). Confirming previous claims in the literature, and supporting my first hypothesis, the data show that males are more likely to engage in penetrative acts than females. Other than the penetrative acts scale, gender did not have a significant effect on the dependent variables when controlling for other factors. Males are not more likely than females to engage in masturbation, fellatio, or genital touching.

More importantly, gender did not have a significant effect on empathy and remorse as predicted in the second hypothesis. This means that gender is not a contributing factor when determining whether or not the individual will be empathic or remorseful. This does not support the aspect of gendered theory which posits that females should show more empathy and remorse. Instead, with empathy, the presence of a behavior disorder (ADD/ADHD, ODD, or Conduct Disorder) increases the likelihood that the individual will have no empathy for his/her victim. And, when controlling for all other factors, problems in school, a behavior disorder diagnosis, and the severity of psychological abuse all have an effect on remorse.

Childhood trauma, especially sexual victimization, had a much greater impact than gender on offense characteristics. The significant effect of past abuse, both psychological and sexual, supports the feminist pathways model by showing the importance of understanding the role of childhood trauma as precursors to offending for both boys and girls (Cauffman 2008). The finding provides support for the feminist criminological perspective, but for boys *and* girls, not only for girls. With the third hypothesis, I predicted the significance of prior victimization;

however, I did not anticipate that this would have a greater impact than gender on offense characteristics.

The lack of significance for gender suggests that males and females are more similar than previously thought. Other than penetrative acts, males and females are similar with regard to non-penetrative sexual acts, empathy and remorse. Chesney-Lind and Shelden found that some research suggests there are more similarities between male and female delinquency than previously thought (1998). They argue, however, that when research focuses on violent offenses, the gender differences are exaggerated because of the higher arrest rates for males (1998). More is made of the dissimilarities resulting in a greater focus on understanding and helping disadvantaged boys. Consequently, the relationship between victimization and crime for girls has been ignored (1998). This research adds more support to the idea that delinquent boys and girls are similar, while at the same time emphasizing the significance of previous abuse for both boys and girls.

Regarding gendered theory, Steffensmeier and Allan (1996) argue that sex differences in offending are greatest for the most serious crimes. Further, they argue that gendered socialization patterns create a unique ethic of care in women that limits their criminal activity (1996). Because women situate law violation within the context of a moral framework emphasizing empathy, they tend not to break the law so as not to hurt or disappoint others (Broidy 2003). Because sex crimes are considered the most serious, those females who do commit sex crimes would, according to this theory, be seen as more masculine. This, in turn, would lessen the dissimilarities between male and female sex offenders. The current study provides evidence to support this application of gendered theory.

It is worth noting that, based on the t-test results there is a significant gender difference in some of the control variables. Boys are significantly more likely to display problem behavior in school and be diagnosed with a behavior disorder. Past research on females has suggested that girls are more likely to display problem behavior (Johnson 1989; Bumby & Bumby 1993& 1997; Mathews, Hunter & Vuz 1997; Taylor 2003; Tardif et al. 2005; Roe-Sepowitz 2008). However, both boys and girls have been shown to be diagnosed with at least one psychological disorder (Gray et al. 1997). These results do support previous research that found children with behavior problems show less empathy than children without behavior problems, although in that study the empathy deficit was greater in females than males (Cauffman 2008).

Girls are significantly more likely to have experienced more severe sexual victimization. The results support previous studies that have demonstrated that girls are more likely to experience childhood sexual abuse than males, and the abuse is more forceful and severe (Fromuth & Conn 1997; Mathews, Hunter & Vuz 1997; Vick et al. 2002; Hickey et al. 2008; Johansson & Kempf-Leonard 2009). The gender differences in these variables are important as these variables consistently returned significant results when included in the logistic regression models. So, while gender may not have a direct effect on the dependent variables (except for penetrative acts), there are significant differences based on gender for those control variables that were significant across the models.

Limitations

As mentioned previously, the data were coded by a third party and as such, some normal behaviors could have been coded as deviant due to the individual's status as sex offender. Since the individual has already been labeled, the person coding the responses may have been influenced by this labeling and subsequently pathologized otherwise normal sexual behavior. A

behavior on its own "is not necessarily evidence of psychopathology" (Kleinplatz 2001:103). The issue is not sexual interest per se, but whether or not the sexual interest causes distress or dysfunction in the adolescent's life (2001). Plus, a therapist's own socialization can be woven into the narrative instead of relying solely on objective observation (2001).

Further, the gender of the individuals coding the data is not clear. In keeping with the feminist critique of science, Scully writes that the "world of research has been monopolized by men, who, reflective of their dominant status, never considered the possibility that their gender might be affecting their data" (1990: 9). It is this blindness, she argues, that leads feminist theorists to question the assumed lack of bias in the scientific method (1990). In addition to potential bias resulting from the offender label, gender of the person coding might have unfairly skewed the data.

In addition, J-SOAP was designed for use with males aged 12 to 18 who have a history of sexually coercive behavior (Prentky 2005). Prior to this dataset, it had never been used to examine girls and younger juveniles. According to the codebook, "The researcher proceeded with the assumption that the fundamental structure of J-SOAP was sound but that essential revisions would be needed to accommodate the unique risk relevant predictors for females and younger juveniles" (Prentky 2005: i). It does not include any discussion of revisions made to accommodate females, leaving the possibility that no revisions were made. This goes back to the issue of generalizability and whether or not male criminological theories can be applied to females. Without a protocol designed for use with females, the data may remain inaccurate.

As is often the case, those individuals who get caught are often those who are already "in the system" in some way: either their families are already in trouble or they are under surveillance for some other reason. This increases the chances of an offender's family history

matching the dysfunctional description found commonly in the literature. It also means that those individuals outside of the gaze of law enforcement and social service agencies remain undetected.

Future Research

Some criminologists argue that "understanding female crime requires an intimate appreciation of 'her story'" which can only be provided through qualitative means such as indepth interviews (Tracy et al. 2009: 179). The current study used quantitative means to assess the effect of gender on juvenile sex offending and did not fulfill the previously mentioned call for qualitative research. As such, future research should use in-depth interviews with large samples of both boys and girls. In addition, in order to accurately assess juvenile female offenders, a J-SOAP designed specifically for girls should be created.

With the current study, I found evidence to show that gender does not have as significant an effect on sex offending as previously thought. Except for penetrative acts, gender was non-significant when regressed against the other variables. The literature on juvenile sex offending suggests that gender is a strong indicator of offending characteristics. Adolescent female sex offenders abuse their victims through fondling, kissing, oral sex and penetration (Fromuth & Conn 1997; Gray et al. 1997; Kubik et al. 2002; Kubik & Hecker 2005; Tardif et al. 2005; Vandiver & Teske 2006). However, males are more likely than females to use penetration on their victims, which was reaffirmed by the current study (Hickey et al. 2008).

There was no significant difference between boys and girls with regards to nonpenetrative acts, empathy, and remorse. This is important, as previous studies have asserted that gender is the strongest predictor of criminality (Tracy et al. 2009). With the current data, I found that prior abuse, behavioral disorder diagnoses, and problems in school were greater indicators of offense characteristics than gender. As such, gender cannot be considered the strongest predictor of all forms of criminality, specifically sexual offending. If gender is not the strongest predictor of juvenile sexual offending, future research must determine what the strongest predictor is, and how that knowledge can be used to help improve treatment strategies.

Based on the results of the independent samples t-test, I determined that, for the control variables, there is a gender difference for problems in school, behavior disorder diagnosis, and sexual victimization. In addition, one or more of these control variables had a significant effect on each of the dependent variables in the study. As these variables were so significant to the offense characteristics, it is important to further understand the gender differences for each. To explain why boys show more problems in school, have more behavioral diagnoses, and experience less victimization is beyond the scope of this paper, but worth pursuing in order to fully understand offense patterns.

The findings for empathy and remorse are especially important as they disprove previously held gender stereotypes for females. Previous research suggests that juvenile female sex offenders show more empathy toward their victims than males (Ray & English 1995). And although more recent research has shown that sexually aggressive girls feel less empathy for victims, the comparison sample was made up of peers, not juvenile male offenders (Kubik & Hecker 2005). With a larger sample than the aforementioned studies, and while controlling for other variables, gender did not have a significant effect on empathy or remorse. I found evidence to show that the presence of a behavior disorder has a far greater effect than gender does on empathy. Further research should focus on those elements of this study that predicted offense characteristics, empathy and remorse to gain a better understanding of how they are related to criminal sexual activity.

In conclusion, this study has attempted to explore further the effect of gender on juvenile sexual offending. Although the arrest and conviction rates for males and females differ greatly, gender is not a strong predictor of certain offense characteristics and empathy or remorse among those that are known sex offenders. In keeping with the gendered perspective, the non-significance of gender in regards to empathy and remorse lessens the dissimilarities between males and females. Therefore, the convicted females are more masculine, and less influenced by gendered socialization. This thesis shows that, in support of feminist pathways research, prior victimization has a great effect on offense characteristics for both boys and girls, and therefore we should no longer be emphasizing the dissimilarities between boy and girl offenders. Rather, future research should re-focus on prior victimization, behavior disorders, and problems in school using comparative samples of boys *and* girls to truly understand juvenile sex offending. Perhaps then the appropriate treatment strategies and policies can be implemented to help stop the cycle of abuse.

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