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Hillary Blythe Despres
Three Independent
Investigations on Disclosure
of Childhood Sexual Abuse
and Psychological
Functioning, Family and
Community Violence, and
Trauma and Non-Sexual
Crime

ABSTRACT

This thesis project contains three separate articles that are new areas of investigation in the juvenile sex-offending field. The data comes from 332 adjudicated juvenile sex offenders and 179 non-sex offending delinquents in six residential facilities in a Midwestern state who participated in an anonymous cross-sectional study. The first article is an exploratory study that investigates family reaction to disclosure of childhood sexual abuse among juvenile sex offenders and their subsequent psychological functioning. The findings suggest that negative reaction to disclosure of CSA impacts sex offending behavior, family environment and psychological functioning. The second article is a descriptive study that explores exposure to community and family violence among sex offenders and non-sex offending delinquents. Juvenile sex offenders were found to have high rates of exposure to community and family violence and had significantly more exposure to many of the community and family violence variables studied than non-sex offending delinquents. Family violence was also found to strongly predict the group membership of juvenile sex offenders (85%). The third article is a comparative study of traumatic experiences and engagement in non-sexual crime among juvenile sex offenders and non-sex offending delinquents. Juvenile sex offenders were

found to engage more often in many different types of non-sexual crime than non-sex offending delinquents. Physical neglect was found to be the only predictor of engagement in non-sexual criminal behavior for both juvenile sex offenders and non-sex offending delinquents. Research and practice implications are discussed.

THREE INDEPENDENT INVESTIGATIONS ON DISCLOSURE OF CHILDHOOD
SEXUAL ABUSE AND PSYCHOLOGICAL FUNCTIONING, FAMILY AND
COMMUNITY VIOLENCE, AND TRAUMA AND NON-SEXUAL CRIME

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

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2007

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS..... ii

TABLE OF CONTENTS..... iii

LIST OF TABLES..... v

LIST OF FIGURES..... vii

ARTICLE

I. Juvenile sex offenders: Disclosure of childhood sexual abuse, family environment and psychological function

 I. ABSTRACT..... 2

 II. INTRODUCTION..... 3

 III. METHODOLOGY..... 10

 IV. RESULTS..... 14

 V. DISCUSSION..... 17

 REFERENCES..... 25

II. Juvenile Sex Offenders and Non-Sex Offending Delinquents’ Exposure to Community and Family Violence

 I. ABSTRACT..... 34

 II. INTRODUCTION..... 35

 III. METHODOLOGY..... 42

 IV. RESULTS..... 45

 V. DISCUSSION..... 50

 REFERENCES..... 54

III.	Traumatic experiences and non-sexual crime among juvenile sex offenders and non-sex offending delinquents	
I.	ABSTRACT.....	64
II.	INTRODUCTION.....	65
III.	METHODOLOGY.....	71
IV.	RESULTS.....	74
V.	DISCUSSION.....	81
	REFERENCES.....	86

LIST OF TABLES

Table	Page
 Article I	
1. Frequency of Juvenile Sex Offenders Living Arrangements.....	10
2. Cronbach’s Alpha on MACI Sub Scales.....	13
3. Intercorrelations between Disclosure of Child Sexual Abuse, Home Environment And Sex Offending Behavior.....	18
4. Intercorrelations between Psychological Functioning (Alphabetized) and Responses to Disclosure of Childhood Sexual Abuse and Abusive Home Environment among Juvenile Sex Offenders.....	19
 Article II	
1. Comparisons of Juvenile Sex Offenders and Non-Sex Offending Delinquents Exposure to Violence.....	47
2. Comparisons of Juvenile Sex Offenders and Non-Sex Offending Delinquents Exposure to Trauma Experiences.....	49
3. Summary of Logistic Regression Analysis for Variables Predicting Sex Offending Status.....	50
 Article III	
1. Cronbach’s Alpha on Elliot’s Delinquency Sub Scales.....	73
2. Juvenile Sex Offenders and Non-Sex Offending Delinquents Group Means of Self-Reported Non-Sexual Criminal Activity.....	75
3. Differences on Juvenile Sex Offenders and Non-Sex Offending Delinquents Self-Reported Trauma Experiences on CTQ Scales.....	77

4. Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime: Juvenile Sex Offenders and Non-Sex Offending Delinquents.....	79
5. Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime: Non-Sex Offending Delinquents.....	80
6. Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime Total Score: Juvenile Sex Offenders.....	81

LIST OF FIGURES

Figure	Page
Article I	
1. Frequency of Positive Reactions to Disclosure of CSA among Sexually Victimized Juvenile Sex Offenders.....	15
2. Frequency of Negative Reactions to Disclosure of CSA among Sexually Victimized Juvenile Sex Offenders.....	15
Article II	
1. Comparison of Juvenile Sex Offenders and Non-Sex Offending Delinquents Exposure to Community and Family Violence.....	46
2. Exposure to Community Violence Group Means.....	48
Article III	
1. Non-Standardized Group Means among Juvenile Sex Offenders and Non-Sexual Delinquents Self-Reported Engagement in Non-Sexual Criminal Activity.....	76
2. Group Means on CTQ Scales among Juvenile Sex Offenders and Non-Sex Offending Delinquents Self-Reported Trauma Experiences.....	78

Article I

Juvenile Sex Offenders: Disclosure of Childhood Sexual Abuse, Family Environment and
Psychological Functioning

Abstract

The purpose of this study was to explore the relationship between family reaction to disclosure of childhood sexual abuse, family functioning and subsequent psychological functioning of juvenile sexual offenders. A total of 332 adjudicated juvenile sex offenders in a Midwestern state participated in an anonymous cross-sectional study. Non-standardized questions were used to measure negative and positive family reactions to disclosure of sexual abuse, aversive family environment, and number of victims the youth perpetrated against. The Self Report Sexual Aggression Scale (SERSAS) was used to determine youth's total force used when offending (Burton, Miller, & Shill, 2002). The Millon Adolescent Clinical Inventory (MACI) (Millon, 1993) was used to assess psychological functioning. The results suggest that children who receive a negative reaction to disclosure of CSA are more likely to use force in their sex offending and are raised in aversive home environments that are disruptive, violent and engage in criminal activity. Juvenile sex offenders who received a negative reaction to their disclosure of CSA seemed more likely to be introverted, doleful, unruly, forceful, oppositional, self-demeaning, have identity diffusion and be exposed to more family discord and were less likely to be submissive and conforming. Whereas youth who received a positive response to their disclosure of CSA tended to be less introverted, doleful, unruly, forceful, oppositional, self-demeaning, self devaluated, substance abuse prone, and are less likely to have depressive affect, eating dysfunctions, family discord, identity diffusion and suicidal tendencies. They were also more likely to be submissive, conforming and have sexual discomfort.

Juvenile Sex Offenders: Disclosure of Child Sexual Abuse, Family Environment and Psychological Functioning

Juvenile sex offending is a significant problem that needs further attention. A significant amount of research reveals that many male adolescent sexual abusers were the victims themselves of childhood sexual abuse (CSA) (Burton, 2000; Manocha & Mezey, 1998; Romano & De Luca, 1997; Worling, 1995). Prevalence of CSA among adolescent sex offenders has been reported as high as 75% (Romano & De Luca, 1997). These results suggest that adolescent sexual offenders may repeat or act out their early trauma history. What if sexually victimized juvenile sex offenders also received a negative reaction to their disclosure of CSA? Would it have had any effect on their sex offending behavior and mental health? The combination of surviving CSA, being raised in an aversive family environment, and having a negative reaction to their disclosure of CSA may have a profound effect on a youth's delinquent development and psychological functioning.

Short and Long Term Effects of Child Sexual Abuse

The impact of child sexual abuse (CSA) is serious and can manifest itself in a variety of different symptoms and pathologies. In the last two decades, an increasing body of literature has emerged that investigates the prevalence and psychosocial effects of CSA. Although the list of maladjustment and developmental problems are long, Posttraumatic Stress Disorder (PTSD) and sexualized behavior are the most frequently reported problems (Paolucci, Genius, Violato, 2001). It is well documented that children who are sexually abused are at much greater risk for developing symptoms of PTSD (Ackerman, Newton, McPherson, Jones, Dykman, 1998; Briere & Elliott, 1994; Green,

1993; McCleer, Calaghan, Henry & Wallen, 1994). Children who are sexually abused are also more likely to exhibit sexualized behavior than non-abused children (Kendall-Tackett, Williams, & Finkelhor, 1993; Hall, Matthews & Pearce, 1998). Children who have been sexually abused are also more likely to display sexualized behavior if they were abused in the home compared to children molested outside of the home (Estes & Tidwell, 2002).

The most frequent problems associated with both children and adults who were sexually abused during childhood are anxiety, conduct disorder, depression, eating dysfunctions, identity confusion, physical aggression and substance abuse (Bergen, Martin, Richardson, Allison & Roeger, 2004; Briere & Elliott, 1994; Dinwiddie et al., 2000; Finkelhor & Browne, 1985; Gamble et al. 2006; Goldfarb, 1987; Jarvis & Copeland, 1997; Lanktree Briere, & Zaidi, 1991; Lipovsky, Saunders & Murphy, 1989; Singer, Petchers & Hussey, 1989; Spear & Skala, 1998; Nelson et al., 2002; Wonderlich et al., 2000). It is also well documented that many adults who were victims of CSA continue to have significant problems with depressive symptoms, PTSD, and anxiety in their adult years (Gamble et al., 2006; McNally, Pearlman, Ristuccia & Clancy, 2006).

Reporting of CSA

In order to end child sexual abuse it is imperative that we understand the reporting process. Researchers have found that community members (family member or trusted adult) are more likely to disclose sexual abuse to social workers, medical staff, and police (61% of cases) than children (39% of cases) (Collings, Griffiths & Kumalo, 2005). Children are more likely to disclose sexual abuse when the theme of sexual abuse is brought up in conversation by their caretakers (Jensen, Gulbrandsen, Mossige, Reichelt,

& Tjersland, 2005). Researchers have found that children will not disclose CSA for many reasons, including fear of retribution and abandonment, self-blame, lack of awareness, shame, guilt, and difficulty talking about abuse (Palmer, Brown, Rae-Grant & Loughlin, 1999; Sauzier, 1989). Younger children may also not disclose CSA because of their cognitive limitations. For example, younger children may not understand that sexual abuse is inappropriate, because they lack knowledge of societal norms and taboos (Goldman & Goldman, 1982). At the same time, younger children may be more likely to accidentally report the abuse than older children because they may be unaware that it is wrong.

There are many reasons why children may not disclose sexual abuse. For example, children who are sexually abused may also be physically threatened by the perpetrator and keep silent out of fear (Crisma, Bascelli, Paci, & Romito, 2004). Young children are developmentally egocentric and may internalize events as being caused by them. This early narcissism can make children feel that they are to blame for their own abuse. They may also feel powerless in stopping sexual abuse, and may fear that disclosure will cause trouble for their family (Crisma et al., 2004). Children may also believe that talking about the abuse is more traumatic in itself than keeping quiet (Berliner & Saunders, 1996). When adults around the child fail to notice the symptoms of sexual abuse being exhibited by changes in the child's behavior or physical remnants caused by the abuse, or when the adults witness the abuse and fail to act on it, the child is left alone to make sense of it and to defend against the extremely damaging psychological and physiological effects that inevitably occurs.

Failure of adults to report their child's sexual abuse seems more common than one would like to believe. Everson, Hunter, Runyon, Edelson and Coulter (1989) found that less than 50% (N = 88) of mothers whose children had reported sexual abuse took action to remove or report the offender to authorities. Seventy-five percent of this sample did report believing their allegations and/or provided emotional support. There are significant costs that can be associated with sexual abuse disclosure when the perpetrator is a member of the family. The child's removal from the home is a significant fear (Hunter, Coulter, Runyan & Everson, 1990). Loss of relationships, reduced income, increased dependence on government programs, employment disruption, and change of residence can often follow disclosure (Massat and Lundy, 1998). If the perpetrator is violent, the mother may fail to report CSA out of fear of the perpetrator harming her or the child (Palmer, Brown, Rae-Grant & Loughlin, 1999). Or the mother may be reluctant to take action in case the perpetrating family member is alienated, incarcerated, or will leave the home (Palmer et al., 1999). Disclosure may also not bring an end to the abuse (Palmer, Brown, Rae-Grant & Loughlin's, 1999).

Child Sexual Abuse, Family Support, and Outcomes

Given all of the negative outcomes that can arise from CSA, attempts need to be made to improve our understanding of the disclosure process and outcome. What could buffer a child from the negative effects of CSA? The children's family may be the most important buffer as the children are dependent on them for their emotional and physical well-being. Researchers have, in fact, found that children who are sexually abused are more likely to have optimal outcomes if they have supportive non-offending guardians (Briere & Elliot, 1994; Fromuth, 1986; Kendall-Tackett, Williams, & Finkelhor, 1993).

These findings illustrate the importance the family has in the recovery of a child who has been sexually abused and the family as a unit.

If a child receives an ambivalent response from a parent when they disclose CSA, this may teach the child to also be ambivalent towards their sexual abuse. Same too if the perpetrator or the non-perpetrator adult is witnessing the abuse and not disclosing or stopping the abuse; this may teach the child that abusive behavior is acceptable and normative. Or if a parent does not show concern or distress to the disclosure made by the child, the child may, again, believe that the abuse is acceptable. This lack of reaction may even lead the sexually abused child towards reenacting the same abuse on other people (Ray, Smith, Peterson, Gray, Schaffner, & Houff, 1995).

Survivors of CSA who disclose early may have a higher chance of receiving a negative reaction from their family members and may also develop more psychological problems. For example, Roesler (1994) found that adults who disclosed sexual abuse during childhood reported having significantly worse reactions from their family members when they disclosed sexual abuse than those who waited to disclose when they reached adulthood. Roesler also found that adult survivors of CSA who received negative reactions from the first person they told (the majority disclosed to family members) displayed worse scores on measures of general trauma symptoms, PTSD symptoms, and disassociation. This suggests that children who receive negative reactions to their disclosure of sexual abuse may have significant emotional and psychological difficulties when they are adults. Alternatively, perhaps those children who do not report the occurrence of sexual abuse may have suffered from more severe abuse and been in a more aversive home environment than those that did report. In either explanation these

speculations indicate the important role the family may have in predicting optimum outcome.

Given the great number of negative effects of CSA that have been explored in the literature it may be likely that CSA may contribute to delinquent and/or sex offending behavior and subsequent mental health problems. Of particular interest is family functioning and disclosure of childhood sexual abuse in juvenile sex offenders. As the researchers have shown, CSA can have a profound effect on the survivor. The degree of family support in reaction to sexual abuse also seems to impact how the survivor will cope with the trauma. Is it possible that CSA, reactions to disclosure and family functioning may help explain the development of some juvenile sex offenders?

Juvenile Sex Offenders and Their Families

A child's healthy development often depends upon the environment they are raised in. A child's emotional and physical development is dependent on their primary caregivers. The child's family is usually where children first learn appropriate boundaries, morals, and rules. Researchers have found that many delinquents are raised in chaotic and dysfunctional families (Manocha & Mezey, 1998; Ryan et al., 1996, Schaeffer & Borduin, 1999; Williamson, Borduin, Howe, 1991). Families of juvenile sex offenders have been characterized as inadequate and subject to neglectful or abusive parental care, marital violence, substance use, mental illness, and parental criminality (Manocha & Mezey, 1998). The results of these studies create a picture in which sexual offenders are significantly exposed to unstable and aversive family environments. What if offenders who were sexually abused as children are also given a negative reaction to their disclosure to sexual abuse? Would it affect their psychological functioning or sex

offending patterns? Would they have a different outcome if they received a positive outcome? Given that they were raised in an aversive home environment it could easily be rationalized that they were most likely given a negative reaction to their disclosure of CSA. This is not to say that all aversive families consciously decide to respond negatively to their child's disclosure. Perhaps these families have no knowledge as to how to respond appropriately to their children due to the chaos that surrounds their own lives. It is also possible that their caregivers were either ambivalent to the situation or secretive because they were involved in the perpetration and did not report CSA to the authorities.

There is very little research that explores the family's reaction of the juvenile offender's disclosure of CSA. Hunter (2000) is the first to report negative family reaction to disclosure in this population. Hunter found that youth who perceived their family as having been less supportive in their disclosure of CSA were more likely to have sexually perpetrated against young children. These results are significant as it directly suggests that negative reaction to the disclosure of CSA can directly have an impact on youth repeating the behavior that was done to them. Perhaps a negative reaction to disclosure of CSA coupled with an aversive family environment may put the child at risk for repeating the sexual offending behavior. Based on the aforementioned research potentially this same combination may also result in poor mental health.

Therefore, the purpose of this study is to explore the relationship between family functioning and family reaction to disclosure of CSA and subsequent psychological functioning of juvenile sexual offenders. Does negative parental support to disclosure of

CSA and aversive family environments increase the risk of a youth sexually offending?

What is their subsequent psychological functioning?

Methods

Participants

A total of 332 adjudicated juvenile sex offenders in a Midwestern state participated in an anonymous cross-sectional study. The average age of the sample of the sample was 16.70 years ($SD = 1.65$ years). The average grade of participants was the 9th grade ($SD = 1.63$ years). Forty-seven percent of juvenile sex offenders selected Caucasian as their racial background and 53% selected person of color (i.e. Black, Hispanic, Native American, Asian and Arab American)¹. Table 1 represents who the youth lived with at the time of their offenses.

Table 1: Frequency of Juvenile Sex Offenders Living Arrangements

Living Arrangement†	Percentage
Father and a Partner	3%
Other Relatives	3%
Foster Home	6% ^b
Grandparents	8%
Mother and a Partner	17%
Single Mother	23%
Two Parent Household	30%

† Sorted Numerically

¹ Participants were classified into these racial categories to protect identity.

Materials

To determine whether a youth was sexually victimized as a child, participants were asked a simple yes/no question. Nine non-standardized questions were used to determine the youth's family response to their disclosure of sexual abuse. For the purpose of exploring negative and positive responses to disclosure of sexual abuse the variables were divided into two categories. Positive responses included supportive, got help, reported it, helped, made it stop and were mad. Questions were asked using a five point scale (1 = Never to 5 = Always). The scale was further collapsed into a three point scale for purpose of analysis which included the responses never, sometimes/occasionally, and frequently/always. This scale was found to have a strong internal reliability ($\alpha = .89$). Negative responses included my fault, ignored it and laughter which had a moderate internal reliability ($\alpha = .76$).

A total of 13 non-standardized questions about the participant's family were used to measure aversive family environment. The simple yes/no/don't know questions included parent drug and alcohol use history, parent drug dealing history, illness or physical health problems in the family, mental health problems in the family, frequent changes in adults living at home, neglect of children, physical abuse of children, sexual abuse of children, illegal acts by family members (besides offender's own history), hitting, slapping, punching or other violence between parents or adults at home, children being placed outside the family, moves or homelessness, and poverty.

A non-standardized question was used to determine the number of victims the youth sexually perpetrated against. The Self Report Sexual Aggression Scale (SERSAS) was used to determine youth's total force used when offending. The SERSAS is a multi-

item inventory used in prior studies (Burton, Miller, & Shill, 2002; Burton, 2003). The scale measures sexually aggressive behaviors over the lifespan. Questions about several sexual acts are all prefaced with “Have you ever conned or forced someone to ...?”. The original several page survey was reduced to two pages based on collapsed variables used in previous projects. This instrument is essentially a checklist of relationships and acts with a previous 8-week test-retest agreement, for a small sample, of 96% (Burton, 2000).

The Millon Adolescent Clinical Inventory (MACI) (Millon, 1993) was used to assess psychological functioning. It was designed for youth in treatment or correctional facilities to assess Clinical Syndromes (major mental illnesses), Personality Patterns (maladaptive patterns of experiencing oneself and interacting with others) and Expressed Concerns (perceptions of own psychological development and actualization)(Salekin, Leistico, Schrum, Mullins (2005). It was normed on 579 adolescents in such facilities with two smaller cross-validation samples. The scales derived from the 160 True-False items are based on Millon’s theory of personality (Millon & Davis, 1996). There are twelve personality pattern scales on the MACI, including those measuring Introversive, Inhibited, Doleful, Submissive, Dramatizing, Egotistic, Unruly, Forceful, Conforming, Oppositional, Borderline Tendency, and Self-demeaning tendencies. With the exception of the Forceful scale ($\alpha = .35$) which was dropped from further analyses, the remaining scales had acceptable inter-item reliability with Cronbach’s alphas ranging from .68 for the Unruly scale to .86 for the Self Demeaning scale (see Table 2).

Table 2: Cronbach's Alpha on MACI Sub Scales

Scale	Cronbach's Alpha α
MACI Scales†	
Introversive	.77
Inhibited	.77
Doleful	.83
Submissive	.73
Dramatizing	.77
Egotistic	.75
Unruly	.68
Forceful *	.35
Conforming	.78
Oppositional	.86
Self- demeaning	.72

† Scales are ordered by the order of presentation in the manual

* Not used in further analyses due to poor reliability

Procedure

To gather the research, data collectors went to all the state operated residential facilities that held sexual abusers in a Midwestern state. The data collectors consisted of trained graduate students, faculty and clinical social workers. Each data collector completed an eight hour training that consisted of a thorough explanation of the study, of the method of administration and collection, and went over safety procedures. Consent

was obtained by each of the youth's clinician prior to their participation in the study. The participants were gathered into small groups in a large room at each of the treatment facilities. The data collectors explained the study and passed out consent forms. If the youth chose not to take part in the study they were sent back to their regular programming at the facility. If the participants chose to take part, they signed the consent forms and they were administered the paper-pencil surveys. All material was written at a fourth grade level, with the exception of the standardized measures, however, eight (2%) of the participants did not have the reading skills to complete the paper-pencil based surveys so they were each read aloud the surveys by the data collectors. There was no incentive to participation.

Results

Of the entire sample of juvenile sexual offenders, 55.1% ($N = 179$) were sexually abused as a child. Of those sexually abused, 52% ($N = 89$) reported that their family members did not know about the abuse and 48% ($N = 82$) did know. See Figure 1 for frequencies of positive reactions to disclosure of CSA and Figure 2 for frequencies of negative reactions to disclosure of CSA.

Pearson correlations were used to assess any relationships between responses to disclosure of sexual abuse and total force used, number of victims, aversive home environment experiences and psychological functioning (see Table 3 and Table 4 for complete results).

Figure 1

Frequency of Positive Reactions to Disclosure of CSA among Sexually Victimized Juvenile Sex Offenders

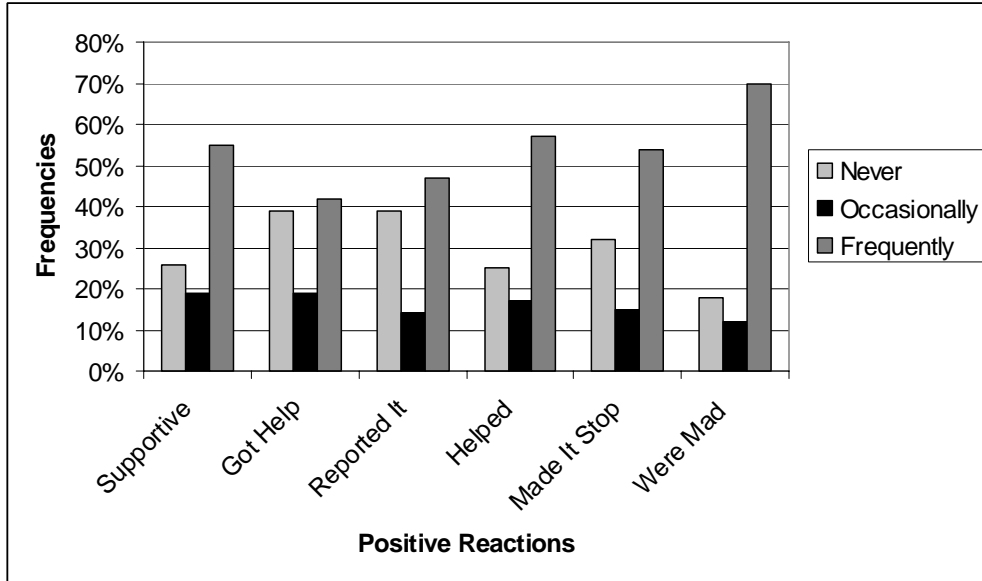
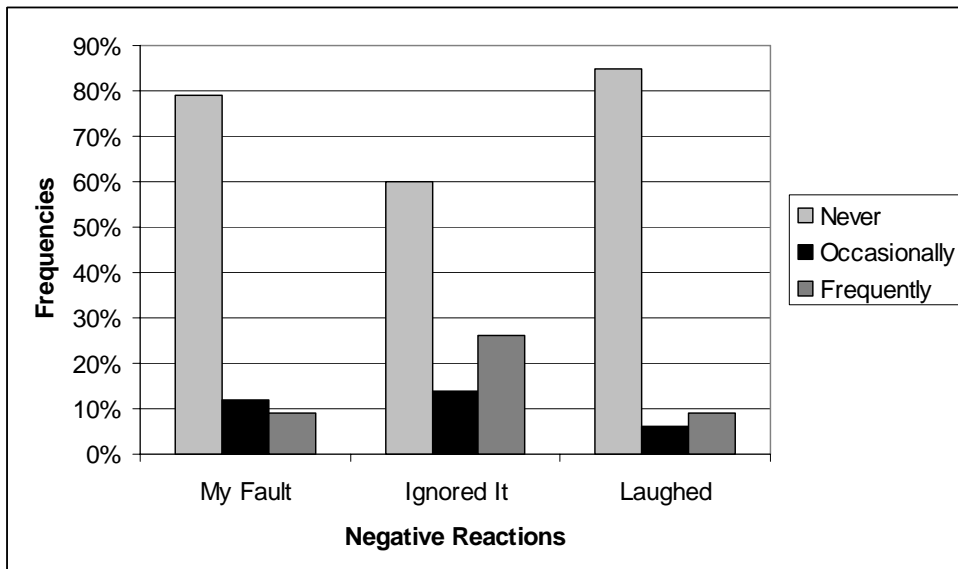


Figure 2

Frequency of Negative Reactions to Disclosure of CSA among Sexually Victimized Juvenile Sex Offenders



Positive Response to Disclosure of CSA, Home Environment and Sex Offending Behavior

Significant negative relationships were found between positive response to disclosure of CSA and overall exposure to aversive home environment ($r = -.360, p = .002$, two-tailed), total force used ($r = -.248, p = .037$, two-tailed), parent alcohol use ($r = -.283, p = .017$, two-tailed), parent selling drugs ($r = -.378, p = .035$, two-tailed), frequent changes in who lives at home ($r = -.280, p = .019$, two-tailed), neglect of children ($r = -.341, p = .004$, two-tailed), physical abuse ($r = -.253, p = .033$, two-tailed), illegal acts ($r = -.289, p = .022$, two-tailed), and hitting, slapping, punching ($r = -.312, p = .009$, two-tailed).

Negative Response to Disclosure of CSA, Home Environment and Sex Offending Behavior

Significant positive relationships were found between negative response to disclosure of CSA and overall exposure to aversive home environment ($r = .433, p = .000$, two-tailed), total force used ($r = .319, p = .007$, two-tailed), parent alcohol use ($r = .347, p = .003$, two-tailed), parent selling drugs ($r = .460, p = .000$, two-tailed), frequent changes in who lives at home ($r = .243, p = .046$, two-tailed), physical abuse ($r = .252, p = .037$, two-tailed), sexual abuse ($r = .325, p = .006$, two-tailed), illegal acts ($r = .402, p = .001$, two-tailed), and hitting, slapping and punching ($r = .253, p = .037$, two-tailed).

Positive Response to Disclosure of CSA and Psychological Functioning

Significant positive relationships were found between positive response to disclosure of CSA and the MACI conforming scale ($r = .460, p = .000$, two-tailed), submissive scale ($r = .261, p = .029$, two-tailed) and sexual discomfort scale ($r = .446, p = .000$, two-tailed). Significant negative relationships were found between positive

response to disclosure of CSA and the MACI introversive scale ($r = -.249, p = .035$, two-tailed), doleful scale ($r = -.327, p = .006$, two-tailed), unruly scale ($r = -.343, p = .004$, two-tailed), forceful scale ($r = -.391, p = .001$, two-tailed), oppositional scale ($r = -.411, p = .000$, two-tailed), self-demeaning scale ($r = -.332, p = .005$, two-tailed), identity diffusion scale ($r = -.301, p = .011$, two-tailed), self devaluation scale ($r = -.273, p = .022$, two-tailed), family discord scale ($r = -.458, p = .000$, two-tailed), eating dysfunctions scale ($r = -.302, p = .011$, two-tailed) substance abuse proneness scale ($r = -.326, p = .006$, two-tailed), depressive affect scale ($r = -.245, p = .041$, two-tailed), and suicidal tendency scale ($r = -.323, p = .006$, two-tailed).

Negative Response to Disclosure of CSA and Psychological Functioning

Significant positive relationships were found between negative response to disclosure of CSA and the MACI introversive scale ($r = .238, p = .047$, two-tailed), doleful scale ($r = .274, p = .024$, two-tailed), unruly scale ($r = .285, p = .018$, two-tailed), forceful scale ($r = .369, p = .002$, two-tailed), oppositional scale ($r = .289, p = .017$, two-tailed), self-demeaning scale ($r = .311, p = .010$, two-tailed), identity diffusion scale ($r = .240, p = .049$, two-tailed), family discord scale ($r = .277, p = .022$, two-tailed).

Significant negative relationships were found between negative response to disclosure of CSA and the MACI submissive scale ($r = -.268, p = .027$, two-tailed) and the conforming scale ($r = -.320, p = .008$, two-tailed),

Discussion

This study is the first to explore negative and positive reactions to disclosure of CSA among juvenile sex offenders. It is also the first study to explore aversive family environment and psychological functioning among juvenile sex offenders who have

Table 3

Intercorrelations between Disclosure of CSA, Aversive Home Environment and Sex Offending Behavior

	Positive Response	Negative Response
	Juvenile Sex Offenders ($N = 72$)	
Total Number of Victims	-.22	.22
Total Force Used In Offense	-.25*	.32**
Overall Aversive Home Environment	-.36**	.43**
Parent Alcohol Use	-.28*	.35**
Parent Selling Drugs	-.38**	.46**
Illness or Health Problems	.13	-.07
Mental Health Problems	-.13	.08
Frequent Changes in Who Lives at Home	-.28*	.24*
Neglect of Children	-.34**	.20
Physical Abuse	-.25*	.25*
Sexual Abuse	-.14	.33**
Illegal Acts	-.29*	.40**
Hitting, Slapping, Punching	-.31**	.25*
Children Placed Outside Family	.04	.01
Lots of Moves or Homelessness	-.17	.20
Poverty	-.18	.20

* = $p < .05$

** = $p < .01$

Table 4

Intercorrelations between Psychological Functioning MACI Scales (Alphabetized) and Responses to Disclosure of Childhood Sexual Abuse and Abusive Home Environment among Juvenile Sex Offenders

	Positive Response	Negative Response
Juvenile Sex Offenders ($N = 72$)		
Anxious Feelings	.22	-.07
Body Disapproval	-.27*	.11
Borderline Tendency	-.23	.18
Childhood Abuse	-.20	.17
Conforming	.46**	-.32**
Delinquent Predisposition	-.06	.06
Depressive Affect	-.25*	.22
Doleful	-.33**	.27*
Dramatizing	.04	-.10
Eating Dysfunctions	-.30*	.10
Egotistic	.09	-.14
Family Discord	-.46**	.28*
Forceful	-.39**	.37**
Identity Diffusion	-.30	.24*
Impulsive Propensity	-.19	.10
Inhibited	-.16	.23
Introversive	-.25*	.24*
Oppositional	-.41**	.29*
Peer Insecurity	-.15	.14
Self-demeaning	-.33*	.31**
Self-devaluation	-.27*	.20
Sexual Discomfort	.45**	-.22
Social Insensitivity	-.18	.24
Submissive	.26*	-.27*
Substance Abuse	-.33*	.18
Suicidal Tendency	-.32**	.18
Unruly	-.34**	.29

* = $p < .05$

** = $p < .01$

disclosed CSA. This study replicated the results of Burton (2000), Ryan et al. (1996), Romano and De Luca (1997) and Worling (1995) where juvenile sex offenders have significant histories of being sexually abused in childhood.

In this study a large number of juvenile sex offenders (55%) reported having been sexually abused. The fact that only approximately half of those sexually abused reported that their family members knew about the abuse, illustrates that many sexually abused children are not disclosing their abuse. It is unclear how many of those reporting that a family member knew about the abuse are victims of incest and are counting the perpetrator as the family member who knew. If this is the case even fewer disclosures took place that could potentially aid the victim. Although it seems that the majority of the families of juvenile sex offenders supported their children's disclosure of CSA, the results illustrate that a high number of families did respond negatively to the youth's disclosure.

The results suggest that juvenile sex offenders who receive a positive reaction to disclosure of CSA are less likely to experience an aversive home environment. For juvenile sex offenders who receive a negative reaction to their disclosure of CSA, the results suggest that they are more likely to be exposed to an aversive home environment in many areas. Overall it seems that juveniles who received a negative reaction to disclosure of CSA are more likely to be raised in aversive home environments that are disruptive, violent and whose members actively engage in criminal behavior. Parents who are under the influence of alcohol may also be more likely to respond negatively to their child's disclosure of CSA because their judgment is affected by their substance use.

Although there was no relationship found between reaction to disclosure of CSA and number of victims, there was a significant relationship found between negative and positive response to disclosure of CSA and total force used by the juveniles in their sexual offending of others. Youth who received a negative reaction to disclosure of CSA used more force in their sex offending, and youth who receive a positive reaction to their disclosure of CSA used less force in their sex offending. Thereby reaction to disclosure of CSA may have an impact on their sex offending behavior. A negative response to disclosure of CSA may have taught these youth that it is acceptable to sexually abuse another person and may have encouraged them to use more force in their sex offending. Alternatively, perhaps these youth are angry over having been sexually abused themselves, and having received a negative reaction to their disclosure of CSA. They may be aware that sexual abuse is wrong, but are releasing their aggression and punishing others for their mistreatment by using more force in their sex offending behavior.

The results on psychological functioning suggest that youth who receive a positive response to their disclosure of CSA tend to be healthier in several dimensions as assessed. Juvenile sex offenders who received a negative reaction to their disclosure of CSA seem more likely to suffer negative mental health consequences.

The results illustrate the shattering effect on a child's development and psychological functioning that CSA and a negative response to their disclosure of CSA can have on a youth. As research has found children who have been sexually abused can experience feelings of depression (Dinwiddie et al., 2000; Lanktree Briere, & Zaidi, 1991; Lipovsky, Saunders & Murphy, 1989, Mennen & Meadow, 1994), low-self worth or self-esteem (Briere & Elliott, 1994; Kendall-Tackett, Williams & Finkelhor, 1993;

Mennen & Meadow, 1994) and increased aggression, anger or conduct problems (Briere & Elliott, 1994; Dinwiddie et al., 2000; Lanktree Briere, & Zaidi, 1991), it is not surprising that youth were found to be more doleful and self-demeaning when they were given a negative reaction to disclosure of CSA or less likely to have suicidal tendencies, oppositional behavior and depressive affect when they received a positive response. The results illustrate that having a negative reaction to disclosure of sexual abuse may in fact increase feelings of depression and aggression in already traumatized youth.

Youth who receive a positive response to disclosure of CSA may be less likely to be unruly, forceful and engage in substance abuse and be more likely to be submissive and conforming because they may not feel the need to act out to resolve their issues as youth who received a negative response. Youth who receive a negative reaction to CSA may be especially more likely to engage in substance abuse to help relieve the pain of both being a survivor of CSA (Bergen, Martin, Richardson, Allison & Roeger, 2004; Singer, Petchers & Hussey, 1989; Spear & Skala, 1998) and not having the support from their families. Like substance abuse, eating dysfunctions which have also been linked to CSA (Jarvis & Copeland, 1997; Goldfarb, 1987, Wonderlich et al., 2000), can also be seen as a form of acting out and may also occur more frequently in youth who received a negative response to their disclosure of CSA. It could perhaps also be argued that youth who have a positive response to their disclosure of CSA may have more respect for rules, regulations and authority figures and are less frequently displaying the above forms of acting out.

Children who have been sexually abused may also find themselves having much confusion about their identity which could be further heightened by a negative reaction to

their disclosure of CSA. They may in particular have confusion surrounding their sexual identity if they were abused by a same sex offender (Finkelhor & Browne, 1985). Their sexual abuse history, coupled with a negative response may throw the youth into an identity crisis which perhaps may also explain why youth in this study were found to have problems with identity diffusion.

Strengths and Limitations

This research was a state wide study that had a large sample size. There are several limitations to this study. The data collected relies on self-report, which brings into question the accuracy of each report. Some participants may have falsified the answers to the questions purposefully, or may have difficulty remembering and accounting for their past behavior due to the nature of their own abuse or the fear surrounding having committed abuse. Other limitations of the study are that it relies on retrospective reporting and the sample was also not randomly selected. It was at the researchers' discretion to classify answers into positive and negative response to the youth's disclosure of CSA. The study may have been stronger if the questions more clearly explored positive and negative response to disclosure of CSA and included many more detailed questions regarding the disclosure process. There was no measure that existed to explore positive and negative response to disclosure of sexual abuse so it was created.

Future Directions

More research which explores juvenile sex offenders' disclosure of CSA and their subsequent psychological functioning seems justified. The results highlight that parental reaction to disclosure of CSA does have an impact on the youth's psychological

functioning and sex offending behavior. Research needs to be directed towards understanding the full impact that negative reaction to disclosure of sexual abuse has on juvenile sex offenders. Further information on the disclosure process that included who the youth most often disclosed to (parent, sibling, teacher etc.) how they disclosed (accidental vs. purposeful), when they disclosed (brought up in conversation, when they reached a certain etc.), and whether families disclosed CSA to the authorities would be particularly beneficial to gather in future research. It would also be beneficial to explore differences in reactions to disclosure of CSA among sex offending youth who were abused by an outsider versus a member of the family. Finally, it is also important for future research to explore why juvenile sex offenders who were sexually abused themselves did not disclose sexual abuse.

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Article II

Juvenile Sex Offenders and Non-Sex Offending Delinquents'

Exposure to Community and Family Violence

Abstract

The purpose of this study was to explore and compare exposure to family and community violence among juvenile sex offenders and non-sex offending delinquents and to determine whether exposure to violence is predictive of youth's group membership. A total of 332 adjudicated juvenile sex offenders and 179 non-sex offending delinquents in six residential facilities in a Midwestern state participated in an anonymous cross-sectional study. Participants were asked to complete the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) as well as non-standardized questions on their exposure to potential community and family violence experiences. Statistical analyses revealed that both groups had high rates of exposure to community and family violence. Juvenile sex offenders were found to have more exposure to some forms of family violence (sexual, physical, and emotional abuse), and community violence (being beat up, and being threatened to be stabbed and killed). Exposure to family violence was found to significantly predict the group membership the youth.

Juvenile Sex Offenders and Non-Sex Offending Delinquents'

Exposure to Violence

Children and their families in the United States are frequently exposed to violence each year. Exposure to violence gives rise to a wide spectrum of dysfunctional effects from internalizing behaviors to aggressive and violent behavior (Salzinger, Feldman, Stockhammer & Hood, 2001). Violence exposure among the juvenile sex offender population is virtually uncharted territory in the research. Given the vast amount of research that is consistently showing detrimental outcomes for children who are exposed to violence, and the strong link between violence exposure and subsequent aggression, it seems very likely that violence exposure may have an impact on juvenile sex offenders.

Children's Violence Exposure

Children's exposure to live violence can primarily come from two sources, the community/school and the home. At home the child can be the witness of interparental violence and/or the victim of physical and sexual abuse. In the community or the school the child can be the victim or the witness of murder, beatings, stabbings, shootings, muggings, sexual assault, bullying etc. Sometimes the violence in the community and school are committed by strangers or people they know. Often violence in these areas escalates over drug use, drug sales, or other criminal activities. Sometimes community violence can spread into the home or school; for example, gunfire on the street may spread into the neighborhood yards, school yards or even inside the homes. Older children may particularly encounter a great deal of violence in their schools and in the community, where children are now often carrying guns and other weapons to protect themselves, and gangs are being formed to protect interests and members. Some children

may be exposed to all two realms of violence, where they come from an abusive home, live in a violent neighborhood and attend a school that is located in that violent neighborhood.

Community Violence

There is a great deal of research that links exposure to community violence to psychological and emotional problems. Research has strongly linked Post Traumatic Stress Disorder (PTSD) to exposure to community violence (Horowitz et al., 1995; Kliewer et al., 1998; Overstreet, 1999). Children who experience violence are also more likely to be depressed (Campbell & Schwartz, 1996; Freeman, Mokros, & Poznanski, 1993; Gorman-Smith & Tolan, 1998). Children who have been exposed to violence have also been reported as having greater fear and worries of death and injury (Cooley-Quille, Boyd, Frantz and Walsh, 2001; Freeman, Mokros & Poznanski, 1993). These fears included injury, the unknown, danger and other circumstances related to living in a hostile environment. The anxiety, stress, and fear that can arise from exposure to violence can interfere with a child's normal developmental tasks, such as development of trust, sense of safety, emotional regulation, explorations of the environment, and ability to form social relationships (Overstreet, 2000). Living in a violent neighborhood does not mean that all children will become violent themselves, rather future violent behavior is also dependent on family, individual and peer characteristics (Stewart, Simons & Conger, 2002). The nature of the impact also depends on timing, type and chronicity of exposure (Margolin & Gordis, 2000).

Family Violence

Children can experience acts of violence in the home both directly by being physically or sexually abused by family members and indirectly by witnessing parental violence. Much research has been conducted since the mid 1980s on the effect of family violence on children. This research generally agrees that exposure to violence has a negative effect on children's functioning when compared to those with no exposure (Kitzman, Gaylord, Holt & Kenny, 2003; Margolin & Gordis, 2000; Wolfe, Crooks, Lee, Mc-Intyre, Smith & Jaffe, 2003). A variety of child emotional and behavioral problems have been associated with exposure to family violence. There is strong evidence that links physical abuse and sexual abuse to subsequent mental disorders. For example, PTSD has been reported in cases of sexual abuse (Paolucci, Genius, Violato, 2001), physical abuse (Doyle & Bauer, 1989) and witnessing family violence (Kilpatrick & Williams, 1997). Indeed, PTSD symptoms resulting from witnessing violence in the home has been reported in as young as preschool age children (Levendosky, Huth-Bocks, Semel & Shapiro, 2002) as well as older children and adolescents (Jarvis, Gordon & Novaco, 2005; Silva et al., 2000).

Research has also linked family violence with aggression and depression in children. Children exposed to family violence more often show internalizing (anxiety, withdrawal) and externalizing (aggression, delinquency) problem behaviors than those with no exposure to family violence (Litrownick, Newton, Hunter, English & Everson, 2003; Osofsy, 1999). Children who are exposed to domestic violence may also have depressive features even if they are not physically injured (Sternberg et al., 1993). The relationship of the abuser to the victim may also play a significant factor in the types of

symptoms children will exhibit following exposure. Witnessing father initiated violence against the mother may increase the child's risk for anxiety, conduct disorder and property crime, whereas mother initiated violence against her partner may be more associated to later alcohol abuse (Fergusson & Horwood, 1998).

Children experience the aftermath of being exposed to family violence in different ways. The severity of symptoms arising from being exposed to violence is dependent upon many different factors. Children's psychological reaction to family violence can be more intense on the basis of proximity to the violence, child's temperament, developmental stage, and the severity and frequency of the violence (Osofsky, 1997; Pynoos, Steinberg, Ornitz & Groenjian, 1997).

Violence and Delinquency

The Social Learning theory gives a logical explanation as to why children who have been abused may later repeat the behavior and become aggressive (Bandura, 1978). Under this theory early exposure to violence teaches the youth that aggressive behavior is normative, rewarded and can be accepted even in close relationships. Perhaps a child exposed to pervasive community and family violence may also learn that it is acceptable behavior and becomes part of the cycle of violence by repeating the behavior. It has also been suggested that repeated exposure to violence is likely to reduce inhibitions of antisocial behavior, which may increase the likelihood of the person committing violent acts (Bandura, 1986). Given this theory and the range of problems that can be attributed to all forms of violence it seems very likely that many children exposed to violence may later become perpetrators of the same violence. Although this theory is logical, is there any scientific evidence that links delinquent behavior with exposure to violence?

Research has clearly established a link between exposure to community violence (DuRant, Cadenhead, Pendergrast, Slavens & Linder, 1994; Gorman-Smith & Tolan, 1998; Schwab-Stone et al, 1995), exposure to sexual abuse (Beitchman et al., 1991; Kendall-Tackett, Williams & Finkelhor 1993), exposure to physical abuse (Litrownick, Newton, Hunter, English & Everson, 2003), exposure to spousal abuse (Graham-Berman & Levendosky, 1998; Holden & Ritchie, 1991) and increased aggressive behavior. This research clearly demonstrates that all forms of violence have an impact on increased aggressive behavior. In addition it has also been illustrated that many, albeit not most, witnesses and victims of violence exposure become themselves perpetrators of violence (Fergusson & Horwood, 1998; Gorman-Smith, Henry & Tolan, 2004; Widom, 1989a; Widom, 1989b). Given this link of violence exposure to violence perpetration and aggressive behavior it seems very likely that many delinquents have most likely themselves been witnesses and victims of violence.

Indeed, it has been estimated as high as 50% to 79% of male victims of child maltreatment will later become involved in juvenile delinquency if their abuse happened before the age of 12 (Lemmon, 1999; Stouthamer-Loeber, Wei, Homish & Loeber, 2002; Widom, 1989b). These startling statistics clearly show a link between violence and deviant behavior for some youth. Other research has also shown this same link of child maltreatment before the age of 12 with future adult criminality and violent behavior (Lemmon; Smith & Thornberry, 1995; Stouthamer-Loeber, Wei, Homish & Loeber; Widom, 1989b). Maltreatment during adolescence is correlated with the risk of future arrest, general and violent offending and drug use during early adulthood (Smith, Ireland & Thornberry, 2005).

The results of these studies must be interpreted with caution. Not all children who are exposed to violence become juvenile delinquents. There are also many methodological problems to these studies (Widom, 1989c; Zingraff et al., 1993) including limited design, samples sizes and measurement concerns.

Juvenile Sex Offenders

As the above research shows violence is significantly linked to the development of delinquent behavior, could it also be linked to sexual offending? Juvenile sex offenders have many similar characteristics to many children who are exposed to violence. Families of juvenile sex offenders have been characterized by inadequate, neglectful or abusive parental care, marital violence, substance use, mental illness, and parental criminality (Manocha & Mezey, 1999), which are characteristics that children exposed to violence also often share. It has also been documented that juvenile and adult sex offenders often have a history of child sexual abuse (Burton, 2000; Manocha & Mezey, 1999; Romano & De Luca, 1997; Worling, 1995). Many juvenile sex offenders also come from families that have violence in the home. In their very large study ($N = 1600$) Ryan et al. (1996) found that neglect (25.9%), physical abuse (41.8%), sexual abuse (39.1%), and recent loss of a parent figure (57%) were common occurrences in the histories of the juvenile sex offenders studied. Witnessing violence in the home was the highest reported event (63.4 %) by the juvenile sex offenders. Ford & Linney (1995) and Spaccarelli, Bowden, Coatsworth & Kim (1997) found that juvenile sex offenders also had higher exposure to intrafamilial violence than non-sex offending delinquents. The similarities that many juvenile sex offenders have with children who have been exposed to violence, and the violence exposure that has already been reported in the literature on

juvenile sex offenders, make it very likely that juvenile sex offenders may have higher rates of exposure to multiple forms of violence than non-sex offending delinquents. One is left to wonder if exposure to violence is a contributor to later sex offending.

Violence, Sex Offending and Childhood Development

The impact of violence on a child's development may perhaps suggest that these children may be at greater risk of sexually offending than children who have never been exposed to violence. Children who are exposed to violence often have their trust in others shattered. They learn early that their caregivers cannot protect them from the dangers of the world. The home that a child depends on to be a safe haven becomes no longer protective or comforting after violence surrounds the home from the inside and outside (Margolin & Gordis, 1998). Their sense of safety, a significant factor in normal development, is destroyed. As they are unable to trust those around them their social relationships also become disorganized, as they are unable to form secure attachments (Janoff-Bulman, 1992). Being exposed to a violent environment may also affect moral development (Kuther, 1999). The younger the child is when exposed to violence, the greater the impact it can have on their moral development. This may have an impact on a youth sexually offending especially when the youth does not fully understand the consequences for their behavior and why it is wrong when they have been surrounded by others disregarding human rights and community laws.

Present Study

There is only a small amount of literature that explores overall violence exposure among the juvenile sex offending population and none of it explores it in depth. Some research has been conducted on distinguishing sex offenders from non-sex offending

delinquents (Bullens, Van Wijk, & Mali, 2006; Ford & Linney, 1995; Van Wijk et al., 2005; Van Wijk et al., 2006). Although many characteristics in these two populations differ, the research has yet to fully explore the differences in violence exposure. Ford and Linney (1995) were the first researchers to find any difference among the two populations. The authors found that juvenile sex offenders were exposed to more parental violence and to be victims of physical and sexual abuse than violent non-sexual offenders and status (non-violent) offenders. This research has yet to be fully replicated and the degree of overall violence, which could include family and community violence has yet to be established. The purpose of this study is to explore whether juvenile sex offenders have a history of exposure to violence and to describe what type of history they have compared to non-sex offending delinquents. Specifically, this study seeks to address the following research questions:

- 1) How often have juvenile sex offenders and non-sex offending delinquents been exposed to community and family violence?
- 2) Are juvenile sex offenders more often exposed to community and family violence?
- 3) Does exposure to community and family violence predict whether a youth will sexually offend?

Methods

Participants

A total of 325 adjudicated juvenile sex offenders and 179 non-sex offending delinquents in six residential facilities in a Midwestern state participated in an anonymous cross-sectional study. The average age of the sample was 16.63 years ($SD =$

1.53 years). There was no difference between the groups on age ($t(402) = -1.58$, two-tailed, $p = .114$). Similarly, there was no difference between the groups on current grade level ($t(393) = -1.05$, two-tailed, $p = .296$), with an average of 9th grade ($SD = 1.54$ years) for both groups. Racial composition did vary between the groups ($\chi^2(1, 473) = 6.50$, $p = .011$) with 49.8% of juvenile sex offenders selecting Caucasian and 50.2% selecting person of color (i.e. Black, Hispanic, Native American, Asian and Arab American), and 37.5% of non-sex offending delinquents selecting Caucasian and 62.5% selecting person of color.

Materials

Participants were asked to complete the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) which is a 37-item scale that provides a brief and relatively noninvasive screening of traumatic experiences in childhood. The CTQ has 5 subscales. The sexual abuse subscale is comprised of 6 questions, the physical abuse subscale 5 questions, the emotional abuse subscale 5 questions, the physical neglect subscale 8 questions, and the emotional neglect subscale 9 questions. For each question, participants were asked to rate on a scale of 1 (never true) to 5 (very often true) how often they felt they were exposed to each experience (e.g. “Someone in my family hit me or beat me”). All of the subscales have acceptable inter-item reliability in this project: Sexual Abuse ($\alpha = .83$), Physical Abuse ($\alpha = .91$), Emotional Abuse ($\alpha = .90$) and Physical ($\alpha = .76$) and Emotional Neglect ($\alpha = .92$). The CTQ was used to assess family violence².

² Variables were separated into two categories – family and community violence. The decisions to classify variables into the two different categories of community and family violence were based on the discretion

The Community Violence Exposure Scale was comprised of 9 non-standardized questions about their exposure to possible community violence experiences. For each question participants were asked to rate on a scale of 1 (never) to 4 (many times) how often they were exposed to each experience (e.g. “How many times have you had someone threaten to stab you?”). Community variables included exposure to threats of being stabbed, shot, and killed, being beat up, seeing a stranger shot, stabbed, beat up and killed, and hearing guns. The scale has a strong inter-item reliability ($\alpha = .85$).

Procedure

Data collectors went to each of the facilities in the Midwestern state. The data collectors consisted of trained graduate students, faculty and clinical social workers. Each data collector completed an 8 hour training that consisted of a thorough explanation of the study, of the method of administration and collection, and went over safety procedures. Consent was obtained by each of the youth’s clinician prior to their participation in the study. The participants were gathered into small groups in a room at each of the treatment facilities. The data collectors explained the study and passed out consent forms. If the youth chose not to take part in the study they were sent back to their regular programming at the facility. If the participants chose to take part, they signed the consent forms and they were administered the paper-pencil surveys. Eight of the participants did not have the reading skills to complete the paper-pencil based surveys so they were each read aloud the surveys by the data collectors. There was no incentive

of the researchers as to where we thought participants would be more likely to be exposed to each of the variables

to participation. All material was written at a 4th grade level, with the exception of the standardized measures.

Results

A total of 98% ($N = 324$) of juvenile sex offenders and 91% ($N = 166$) of non-sex offending delinquents were exposed to one or more of the community violence variables studied, and 100% ($N = 325$) of juvenile sex offenders and 100% ($N = 156$) of non-sex offending delinquents who responded to all of the required questions were exposed to one or more of the family violence variables. Figure 1 compares the percentages of the sex offenders and non-sex offending delinquents on each of the exposure to violence variables in the study.

To determine whether differences existed between each of the community violence variables measured independent samples t-tests were utilized. The t-tests revealed that sex offenders were more likely to have been threatened to be stabbed, threatened to be killed and been beat up than non-sex offending delinquents (see Table 1 for complete results and Figure 2 for graph of differences in means).

To determine whether an overall difference existed on exposure to community violence among non-sex offending delinquents and juvenile sex offenders, a t-test was used to compare the means of each group. A significant difference was found between non-sex offending delinquents ($M = 18.14$, $SD = 6.58$) and juvenile sex offenders ($M = 19.64$, $SD = 7.18$) in the amount of community violence they were exposed to ($t(361) = 2.138$, one-tailed $p = .041$).

Figure 1. Comparison of Juvenile Sex Offenders and Non-Sex Offending Delinquents

Exposure to Community and Family Violence

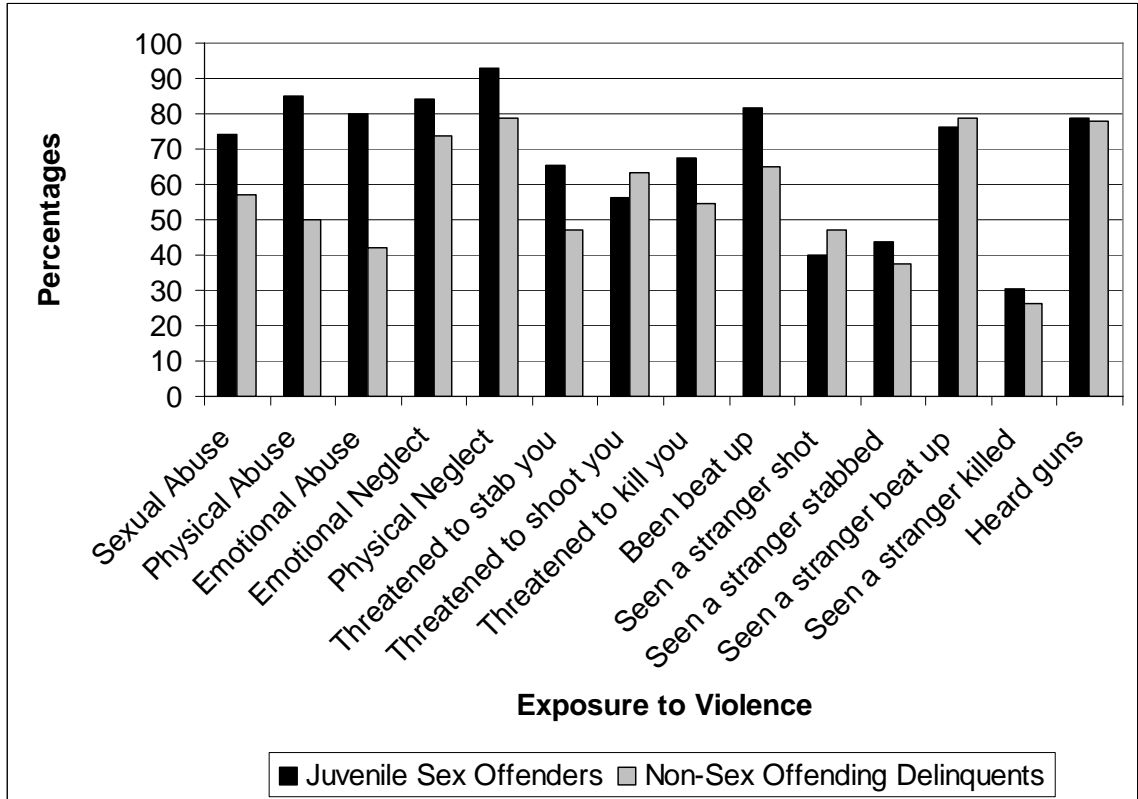


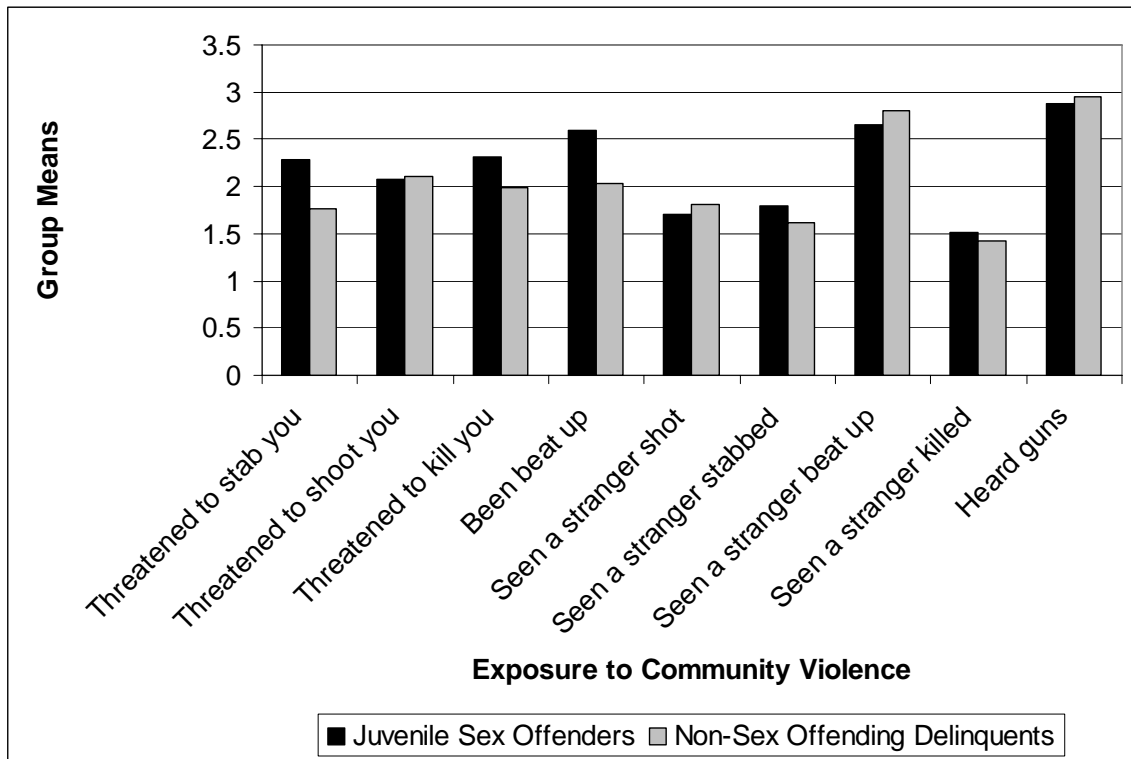
Table 1

Comparisons of Juvenile Sex Offenders and Non-Sex Offending Delinquents Exposure to Violence

	Juvenile Sex Offenders	Non-Sex Offending Delinquents		
	Mean	Mean	<i>df</i>	<i>t</i>
Threatened to be Stabbed	2.28	1.77	378	5.17*
Threatened to be Shot	2.08	2.10	358	.19
Threatened to be Killed	2.32	1.98	340	3.17*
Been Beat Up	2.60	2.03	351	5.91*
Seen a Stranger Shot	1.71	1.81	330	.95
Seen a Stranger Stabbed	1.79	1.61	371	1.96
Seen a Stranger Beat Up	2.66	2.80	337	1.25
Seen a Stranger Killed	1.51	1.43	352	1.01
Heard Guns	2.87	2.95	319	.64

* = $p < .05$

Figure 2. Exposure to Community Violence Group Means



Independent samples t-tests were utilized on each of the trauma experiences variables measured to determine whether any difference existed between the groups. The t-tests revealed that sex offenders were more often exposed to sexual abuse, physical abuse, and emotional abuse than non-sex offending delinquents (see Table 2 for complete results).

To determine whether there was an overall difference in family violence exposure among non-sex offending delinquents and juvenile sex offenders, a t-test was utilized to compare the exposure means of each group. A significant difference was found between non-sex offending delinquents ($M = 50.76$, $SD = 16.59$) and juvenile sex offenders ($M = 69.85$, $SD = 25.95$) in the amount of family violence they were exposed to ($t(441) = -9.75$, one-tailed $p = .000$).

Table 2

Comparisons of Juvenile Sex Offenders and Non-Sex Offending Delinquents Exposure to Trauma Experiences

	Juvenile Sex Offenders	Non-Sex Offending Delinquents		
	Mean	Mean	<i>df</i>	<i>t</i>
Sexual Abuse	12.03	7.98	470	9.53*
Physical Abuse	11.86	7.17	440	9.92*
Emotional Abuse	11.60	6.66	471	11.44*
Emotional Neglect	18.89	16.33	332	3.02
Physical Neglect	15.55	12.85	343	5.05

* = $p < .05$

In order to determine the relative strength of both family violence and community violence in predicting whether a youth would be a sexual offender, a logistic regression was conducted. As Table 3 illustrates, exposure to community violence was not significant in predicting whether a youth would be a sex offender, but exposure to family violence was. The model correctly predicted 70.9% of the juvenile sexual offender group. The model correctly classified many juvenile sexual offenders (85.4%), and did a mediocre job in classifying many non-sex offending delinquents (40.6%).

Table 3

Summary of Logistic Regression^a Analysis for Variables Predicting Sex Offending Status

(*N* = 477)

Independent variables	Regression coefficient	Standard error	Wald statistics
Constant	-1.596	.395	16.345
Community violence	-.022	.017	1.791
Family violence	.047	.006	52.448*

^a $\chi^2 = 77.29, df = 2, p = .000$

* $p < .05$

Discussion

This study has replicated the results of Burton (2000), and Ryan et al. (1996), Romano and De Luca (1997) and Worling (1995) where sex offenders have significant histories of being sexually abused in childhood, and Ryan et al. (1996) for physical abuse, but not neglect. The findings also replicate Ford and Linney's (1995) study where the researchers found that juvenile sex offenders were more likely to be physically and sexually abused than non-sex offending delinquents. This is the first study to report significant differences among juvenile sex offenders and non-sex offending delinquents on their exposure to emotional abuse. It is also the first study to look specifically at community and family violence among the two populations.

The analyses revealed that both sexual offenders and juvenile delinquents have high rates of exposure to both community and family violence. Juvenile sex offenders

and juvenile delinquents did not differ on their overall exposure to community violence, but did so on some of the community violence variables independently. Juvenile sex offenders did, however, have more exposure to being beat up and being threatened to be stabbed and killed. It is unknown why the groups differed on these community violence experiences and not on the others. As some researchers have found that juvenile sex offenders have difficulty in many social situations (Becker, 1990; Smith, Wampler, Jones & Reifman, 2005), it may partially explain why they have been threatened or beat up more often. The trauma research also supports that traumatic experiences can severely interrupt a child's development and may affect their ability to form secure attachments with others (Janoff-Bulman, 1992). The sexual offenders' inability to form attachments with others may put them at risk for being threatened and beat up. Children who have difficulty interacting with others may be more likely to be picked on and teased by their peers. If they are socially inept they may encourage or attract others to act aggressively towards them. They may also have been threatened and beat up more often because others may have discovered their sex offending.

Juvenile sex offenders overall were significantly more likely to witness family violence. They were found to have more exposure to sexual abuse, physical abuse and emotional abuse than non-sex offending delinquents. These results suggest that juvenile sex offenders may have significant trauma histories and that they may be exposed to multiple traumas. Family violence also was found to predict the group membership of juvenile sex offenders. The results of this study confirm that exposure to violence is a significant problem among the juvenile sex offending population and perhaps may have influenced their sex offending behavior.

This research is a beginning step in uncovering juvenile sex offenders' community and family violence exposure. The implications that this research may have towards practice are that such results could be used to help design and implement new policies, practices and procedures in the treatment of sexually offending youth. This study clearly shows that both juvenile delinquents and juvenile sex offenders have significant exposure to violence. The results suggest that juvenile sex offenders in particular may have a strong trauma history. These results should be used to help gear the juvenile sex offending treatment towards addressing their trauma history to ameliorate their offensive behaviors, which is often not a part of current treatments for sex offending (Burton, Smith-Darden, 2001). As the findings of this study suggest that exposure to violence rates are high among juvenile sex offenders this may also be a beneficial component to the typical offender profile. Finally and in a limited fashion; this research should help promote the early treatment of trauma for some children as it possibly may prevent the development of possible sexual offenders.

Strengths and Limitations

This research was a state wide study that had a large sample size, which makes it good as a preliminary investigation into this new area of research. There are several limitations to this study. The data collected relies on self-reporting, which brings into question the accuracy of each report. Some participants may have falsified the answers to the questions purposefully, or may have difficulty remembering and accounting for their past behavior due to the nature of their own abuse or the fear surrounding having committed abuse. The possible difficulty accurately reporting on past behavior highlights another limitation of the study in which it relies on retrospective reporting. The sample

was also not randomly selected. In addition, this study also did not collect other comparison groups, specifically non-delinquent youth, which limits the applicability of the findings. A normal control group would have been particularly beneficial in understanding the magnitude of the effects of violence on sex offending youth and non-sex offending delinquents. As the original study was not designed to gather information that specifically addressed exposure to community and family violence a great deal more information could have been gathered that may have produced higher significance than what has been derived. The results of this study must be interpreted with caution, especially when separating community from family violence since the categories were also created by the researchers' discretion and do not completely represent each violence category. The questions in each of the categories should have been more specific as to whether their exposure came from the community or the family.

Future Directions

More research needs to be conducted that explores juvenile sex offenders and juvenile delinquents exposure to trauma and violence. Research has yet to fully explore the impact that community, family and school violence has on these two populations. This study was a beginning attempt to explore possible community and family violence exposures among these youth. The results are encouraging for some researchers and practitioners, as they directly link violence exposure to delinquent behavior and also show differences among sex offending and non sex offending youth. More detail is needed on juvenile sex offenders' exposure to violence. The future research should additionally collect data on youth's exposure to school violence, as violence is a pervasive problem in schools (Eisenbraun, 2007), and may be a considerable source of their exposure.

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Article III

Traumatic Experiences and Non-Sexual Crime among Juvenile Sex Offenders and Non-Sex Offending Delinquents

Abstract

The purpose of this study was to explore the relationship between trauma (family violence, community violence, physical abuse, sexual abuse, neglect and emotional abuse) and subsequent criminal activity (assault, robbery, theft, drug dealing, property damage, alcohol and drug use) among juvenile sex offenders and non-sex offending delinquents. A total of 332 adjudicated juvenile sex offenders and 179 non-sex offending delinquents in six residential facilities in a Midwestern state participated in an anonymous cross-sectional study. Participants were asked to complete the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) and Elliot, Huizinga and Ageton's (1985) self reported delinquency (SRD) measure. Statistical analyses revealed that juvenile sex offenders were more likely to engage in property damage, felony theft, felony assault, and overall general delinquency than non-sex offending delinquents. Juvenile sex offenders were also found to have more exposure to childhood sexual abuse, physical abuse and emotional abuse than non-sex offending delinquents. Among trauma types, physical neglect was found to be the only predictor of engagement in non-sexual criminal behavior for both juvenile sex offenders and non-sex offending delinquents. Research and practice implications are discussed.

Traumatic Experiences and Non-Sexual Crime among Juvenile Sex Offenders and Non-Sex Offending Delinquents

Juvenile delinquency and sex offending are serious problems that require attention. In 2003, law enforcement agencies made approximately 2.2 million arrests of juveniles under the age of 18 (Snyder, 2005) who were involved in both sex offending and non-sex offending crimes. Efforts need to be aimed towards intervening with youth who are at risk for becoming juvenile sex offenders or delinquents and in need of rehabilitation. In order to provide early intervention, research needs to be conducted to determine what puts a youth at risk for future criminal behavior. More specifically, understanding differences and similarities among juvenile sex offenders and non-sex offending delinquents as a comparison may allow the planning and implementation of more effective treatment strategies for both populations. Research has shown that juvenile sex offenders have been exposed to more potentially traumatic events than non-sex offending delinquents. Yet, not all major types of traumatic experiences have been thoroughly explored in the research. Juvenile sex offenders' engagement in non-sex offending crime is also an area that has yet to be fully explored. Trauma and non-sexual criminal behavior and the relationship between the two may be important areas of investigation in the juvenile sex offending population as both may be prevalent problems that considerably affect the youth and perhaps may help explain their involvement in various types of delinquent behavior.

Trauma

Youth can be exposed to a variety of events that can be potentially traumatic. These events can include sexual abuse, physical abuse, neglect, emotional/verbal abuse,

witnessing violence etc. Trauma can compromise various parts of a child's development including "identity formation, cognitive processing, experience of body integrity, ability to manage behavior, affect tolerance, spiritual and moral development, and ability to trust self and others" (James, 1994, p. 10). Children who are traumatized are often at risk for many behavioral and emotional problems if left untreated. For example, children who have been exposed to traumatic experiences are at greater risk of becoming aggressive, quiet, withdrawn and depressed (Campbell & Schwartz, 1996; Freeman, Mokros, & Poznanski, 1993; Gorman-Smith & Tolan, 1998). Feelings of depression, aggression, and low-self worth are also consistently illustrated in the literature as a consequence of exposure to child maltreatment (Briere & Elliott, 1994; Dinwiddie et al., 2000; Kaplan, Pelicovitz & Labruna, 1999; Kendall-Tackett, Williams & Finkelhor, 1993; Lanktree, Briere, & Zaidi, 1991; Lipovsky, Saunders & Murphy, 1989; Litrownick, Newton, Hunter, English & Everson, 2003; Mennen & Meadow, 1994; Osofsky, 1999). Alcohol and drug use, persistent mental health problems, and involvement in violent activities (Crimmins, Cleary, Brownstein, Spunt & Warley, 2000) are also often problems associated to trauma that can also last into adulthood. Not all children will develop these problems after they are exposed to a traumatic event, however. The degree that one is traumatized depends on the person's reaction to the event and not simply the event alone (James, 1994, p.10). The more exposure that one also has to potentially traumatizing events, the more likely they are to affect the individual.

Juvenile Sex Offenders' Trauma Exposure

Juvenile sex offenders have been exposed to a range of traumatic events that may greatly influence their current behavior and mental health. Childhood sexual abuse has

been the most frequently reported traumatic event experienced by juvenile sex offenders (Burton, 2000; Manocha & Mezey, 1998; Romano & De Luca, 1997; Ryan et al, 1996; Worling, 1995). Physical abuse, emotional abuse, neglect and indirect exposure, such as witnessing violence in the home have also been reported (Ryan et al., 1996; Widom & Ames, 1994). Juvenile sex offenders may also be more likely to suffer from loss of a parent whether through divorce, incarceration, death, separation etc. than non-sex offending children (Hummel, Thomke, Oldenburger & Spect, 2000; Manocha & Mezey, 1999) which may put them at greater risk of being traumatized. Juvenile sex offenders' families have also been reported as troublesome and could also be a vehicle of trauma exposure. Families of juvenile sex offenders have been labeled as inadequate and prone to neglectful or abusive parental care, marital violence, substance use, and parental criminality (Manocha & Mezey, 1998). Parents of juvenile sex offenders may also have their own trauma history (Duane, Carr, Cherry, McGrath and O'Shea, 2002) which may affect their ability to support their child through their trauma.

The rates of exposure to traumatizing events in juvenile sex offenders are high. This is clearly demonstrated by McMackin, Leisen, Cusack, Lafratta & Litwin (2002) who found that 95% of juvenile sex offenders (N=40) had some form of exposure to trauma and 77.5% had three or more trauma exposures. Almost half of the sample was exposed to both sexual and physical abuse while 65% had met the criteria for Post Traumatic Stress Disorder (PTSD). Sixty-eight percent of those physically abused developed PTSD, 84% of those with histories of both physical abuse and sexual abuse developed PTSD, and 100% of those with abuse histories who also had other violence exposure developed PTSD. It has also been reported that as high as 75% of the juvenile

sex offending population have been sexually abused (Romano & De Luca, 1997). These high rates of potential multiple trauma exposures make it difficult to ignore that trauma may play a significant role in the development of a juvenile sex offender and their subsequent criminal behavior.

Research has also clearly established a link between exposure to community violence (DuRant, Cadenhead, Pendergrast, Slavens & Linder, 1994; Gorman-Smith & Tolan, 1998; Schwab-Stone et al, 1995), exposure to sexual abuse (Beitchman et al., 1991; Kendall-Tackett, Williams & Finkelhor 1993), exposure to physical abuse (Litrownick, Newton, Hunter, English & Everson, 2003), exposure to spousal abuse (Graham-Berman & Levendosky, 1998; Holden & Ritchie, 1991) and increased aggressive behavior. This aggressive behavior may have an impact on later participation in criminal activities. It has been clearly demonstrated that many, albeit not most, witnesses and victims of violence exposure become themselves perpetrators of violence (Fergusson & Horwood, 1998; Gorman-Smith, Henry & Tolan, 2004; Widom, 1989).

Delinquent Behavior and Trauma Exposure

The research literature has established a link between child maltreatment and future delinquent behavior (Smith & Thornberry, 1995; Widom, 1989). It is estimated as high as 50% to 79% of male victims of child maltreatment will later become involved in juvenile delinquency if their abuse happened before the age of 12 (Lemmon, 1999; Stouthamer-Loeber, Wei, Homish & Loeber, 2002; Widom, 1989). These statistics are startling and clearly show a link between abuse and subsequent deviant behavior. In longitudinal research, Widom (1989) found that adults who were the victims of childhood maltreatment had significantly more arrests as juveniles and adults for crimes as those

who had no history of childhood maltreatment. Those who committed offenses as juveniles were just as likely to continue with criminal activities as adults. These results clearly show that without intervention childhood maltreatment can cause problems that can continue through adolescence into adulthood.

Prior history of victimization or witness to violence and stressful life events such as divorce, death of loved one etc. have also been shown to put a youth at greater risk for delinquency (Maschi, 2006). Victimization may encourage youth to repeat the same violence. For example, Hill and Madhere (1996) found in a sample of 150 African American youth that mothers reported an increased need for retaliation after victimization, higher ratings of confrontational behavior, behavior characteristics of conduct disorder, and socialized aggression in their children who had been victimized.

Parental criminality may also be a predictor of delinquency and could potentially lead to more exposure to potentially traumatic events. Across three generations of families involved with the law, Farrington, Jolliffe, Loeber, Stouthammer-Loeber and Kalb (2001) found a high concentration of delinquents. This suggests that there exists a cycle of violence and crime among families. Preski and Shelton (2001) also found that there was a significant relationship between parent and sibling criminality and delinquency. It has also been reported that youth with a family member with a criminal history were more likely to engage early in delinquency (adjudicated before age 14) than those with no family history (Alltucker, Bullis, Close & Yovanoff, 2006). Youth who live in families that practice crime may be more at risk for exposure to potentially traumatic events that may come from witnessing the criminal behavior or being separated from caregivers who are caught and sentenced to prison.

Other research has found fewer significant results on the degree of impact that trauma can have on delinquency. The research on trauma and delinquency is particularly unclear for specific types of criminal offenses and traumas (Widom & Ames, 1994; Zingraff, Leiter, Myers & Johnsen, 1993). Although childhood sexual abuse and physical abuse among delinquents has been more recently explored by researchers, emotional abuse, emotional neglect, and physical neglect has received very little attention.

Oddly, there is also little research that explores sex offenders' non-sexual crimes – an often found sequelae of childhood trauma. Although research has reported that many juvenile sex offenders also commit many non-sexual crimes (Taylor, 2003), there is little research that explores the differences between juvenile sex offenders and non-sex offending delinquents. Exposure to traumatic experiences may influence engagement in sex offending and non-sex offending criminal behavior.

The purpose of this study is to explore the relationship between trauma (family violence, community violence, physical abuse, sexual abuse, neglect and emotional abuse) and subsequent criminal activity (assault, robbery, theft, drug dealing, property damage, alcohol and drug use) among sex offenders and delinquents. Do juvenile sex offenders commit fewer non-sexual crimes than non-sex offending delinquents? Are there differences between the non-sexual crimes they commit? Are there differences between the traumas they have been exposed to? Do different types of traumatic experiences predict whether a youth will engage in criminal activity?

Methods

Participants

A total of 332 adjudicated juvenile sex offenders and 179 non-sex offending delinquents in 6 residential facilities in a Midwestern state participated in an anonymous cross-sectional study. The average age of the sample was 16.63 years ($SD = 1.53$ years). There was no difference between the groups on age ($t(402) = -1.58$, two-tailed, $p = .114$). Similarly, there was no difference between the groups on current grade level ($t(393) = -1.05$, two-tailed, $p = .296$), with an average of 9th grade ($SD = 1.54$ years) for both groups. Racial composition was associated with group ($\chi^2(1, 473) = 6.50$, $p = .011$) with 49.8% of juvenile sex offenders selecting Caucasian and 50.2% selecting person of color, and 37.5% of non-sex offending delinquents selecting Caucasian and 62.5% selecting person of color.

Materials

Participants were asked to complete the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) which is a 37-item scale that provides a brief and relatively noninvasive screening of traumatic experiences in childhood. The CTQ has 5 subscales. The sexual abuse subscale is comprised of 6 questions, the physical abuse subscale 5 questions, the emotional abuse subscale 5 questions, the physical neglect subscale 8 questions, and the emotional neglect subscale 9 questions. For each question, participants were asked to rate on a scale of 1 (never true) to 5 (very often true) how often they felt they were exposed to each experience (e.g. “Someone in my family hit me or beat me”). All of the subscales have acceptable inter-item reliability in this project: Sexual Abuse ($\alpha = .83$), Physical Abuse ($\alpha = .91$), Emotional Abuse ($\alpha = .90$) and

Physical ($\alpha = .76$) and Emotional Neglect ($\alpha = .92$). The CTQ was used to assess youth's trauma experiences.

Elliot, Huizinga and Ageton's (1985) self reported delinquency measure was used to assess youth's non-sex offending criminal activity. The scale has 32 questions using a 7-point frequency scale from 0 (never) to 7 (2-3 times per day) on questions ranging from drug use to aggression. The instrument has several subscales including Alcohol Use, Drug Use, Felony Assault, Felony Theft, General Delinquency, Property Damage, Public Disorderly, Robbery and Selling Drug. These subscales had acceptable inter-item reliability (see Table 1) with the exception of Drug Use ($\alpha = .46$) and Public Disorderly ($\alpha = .52$) which were removed from further analyses.

Finally, Social Desirability was assessed using a measure designed for adult sexual offenders, the Balanced Inventory of Desirable Responding (BIDR) (Kroner & Weekes, 1996). This instrument uses 42 questions with a 7-point Likert scale with responses from "not true" (1) to "very true" (7). This measure has two subscales. The Impression Management subscale reflects the extent to which a person responds in a way designed to create a favorable impression upon others. The Self-deception subscale reflects a defensive response style. The version of the instrument used for this study does not have norms or procedures for assessing valid or invalid responding. Rather scores can be assessed for differences in socially desirable responding between the subject groups. A Chronbach's alpha of .92 was calculated for this sample.

Table 1: Cronbach's Alpha on Elliot's Delinquency Sub Scales

Scale	Cronbach's Alpha α
Elliot's Delinquency Scales†	
Alcohol Use	.81
Drug Use *	.46
Felony Assault	.65
Felony theft	.88
General Delinquency	.68
Total Scale (all items)	.94
Property Damage	.74
Public Disorderly*	.52
Robbery	Not calculated - 1 item
Selling Drugs	.84

† Scales presented alphabetically

* Not used in further analyses due to low alpha

Procedure

To gather the research, data collectors went to each state operated residential facilities that held sexual abusers in a Midwestern state. The data collectors consisted of trained graduate students, faculty and clinical social workers. Each data collector went through an eight hour training that consisted of a thorough explanation of the study, the method of administration and collection, and safety procedures. Consent was obtained by each of the youth's clinician prior to their participation in the study. The participants

were gathered into small groups in a large room at each of the treatment facilities. The data collectors explained the study and passed out consent forms. If the youth chose not to take part in the study they were sent back to their regular programming at the facility. If the participants chose to take part, they signed the consent forms and they were administered the paper-pencil surveys. Eight (2%) of the participants did not have the reading skills to complete the paper-pencil based surveys so they were each read aloud the surveys by the data collectors. There was no incentive to participation. All material was written at a 4th grade level, with the exception of the standardized measures.

Results

To determine whether there were any differences between juvenile sex offenders and non-sex offending delinquents in their engagement in non-sex offending criminal activity a t-test was performed on an overall scale of non-sexual crimes. A significant difference was found for overall self-reported frequency of engagement in non-sexual crime indicating that juvenile sex offenders on the SRD total scale ($N = 308$) ($M = 31.80$, $SD = 31.61$) participated more in non-sexual criminal activity than non-sex offending delinquents ($N = 142$) ($M = 22.68$, $SD = 23.36$) ($t(361) = -3.42$, one-tailed $p = .001$).

Independent samples t-tests were conducted on each of the crime variables (alcohol use, drug use, felony assault, felony theft, general delinquency, property damage, and selling drugs) to determine whether there were any differences between the two groups. Significant differences were found for self-reported frequency of property damage, felony theft, felony assault, and overall general delinquency. Juvenile sex offenders reported greater frequency of each of the criminal activity categories than non-

sex offending delinquents. See Table 2 for complete results and Figure 1 for group means and standard deviations.

Table 2

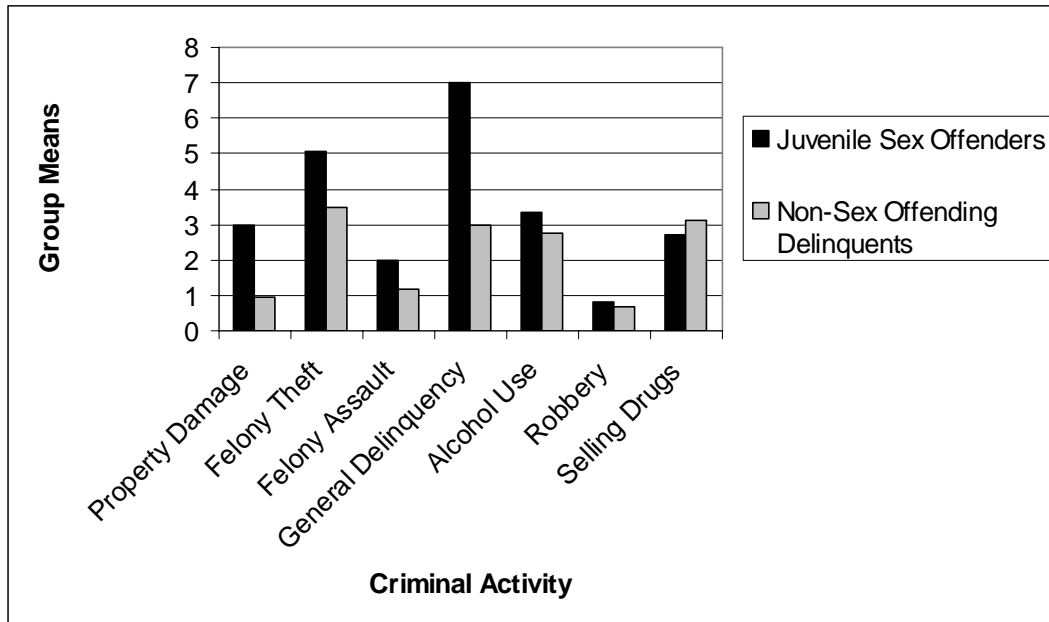
Juvenile Sex Offenders and Non-Sex Offending Delinquents Group Means of Self-Reported Non-Sexual Criminal Activity

	Juvenile Sex Offenders		Non-Sex Offending Delinquents		<i>df</i>	<i>T</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>		
Property Damage	3.00	4.11	.96	2.13	433	6.84*
Felony Theft	5.04	6.55	3.47	5.05	337	2.73*
Felony Assault	1.98	3.11	1.18	2.17	368	3.09*
General Delinquency	7.00	4.11	3.00	3.75	412	7.57*
Alcohol Use	3.36	3.86	2.75	3.68	286	1.60
Selling Drugs	2.71	4.19	3.12	4.48	250	.89
Robbery	.83	1.66	.70	1.56	291	.82

* = $p < .05$

Figure 1

Non-Standardized Group Means among Juvenile Sex Offenders and Non-Sexual Delinquents Self-Reported Engagement in Non-Sexual Criminal Activity



Independent samples t-tests were conducted on each of the childhood trauma experiences (childhood sexual abuse, physical abuse, emotional abuse, emotional neglect, and physical neglect) to determine whether there were any significant differences among the two groups. Significant differences were found for self-reported frequency of childhood sexual abuse, physical abuse, and emotional abuse. Juvenile sex offenders reported more frequent trauma for three of the five types assessed than non-sex offending delinquents. See Table 3 for complete results and Figure 2 for group means.

Table 3

Differences on Juvenile Sex Offenders and Non-Sex Offending Delinquents Self-Reported Trauma Experiences on CTQ Scales

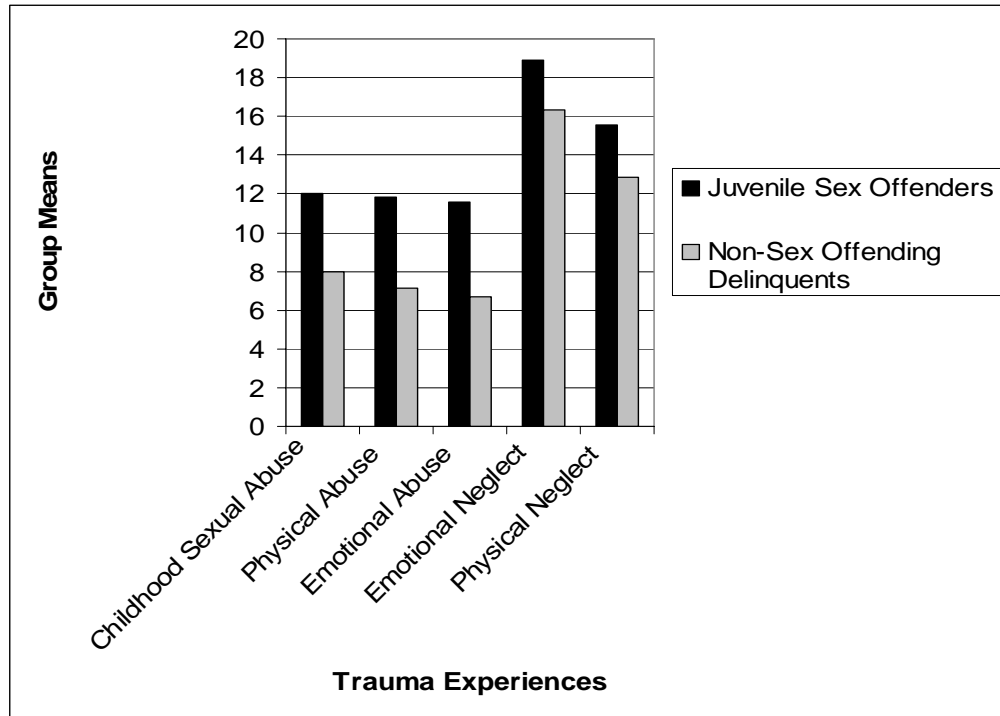
	Juvenile Sex Offenders		Non-Sex Offending Delinquents		<i>df</i>	<i>t</i>
	Mean	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Sexual Abuse	12.03	6.56	7.95	2.70	471	7.29**
Physical Abuse	11.86	6.25	7.11	3.98	474	8.57**
Emotional Abuse	11.60	6.18	6.62	3.26	471	9.26**
Emotional Neglect	18.89	9.19	16.01	8.14	473	3.29*
Physical Neglect	15.55	5.97	12.93	5.32	474	4.62**

* = $p = .01$

** = $p < .05$

Figure 2

Group Means on CTQ Scales among Juvenile Sex Offenders and Non-Sex Offending Delinquents Self-Reported Trauma Experiences



To determine whether traumatic experiences predict non-sex offending criminal activity three hierarchical multiple regressions were conducted. The dependent variable was the total non-sex offending crime variable and the independent variables were the traumatic experiences. Social desirability was controlled for in each regression. The first multiple regression was calculated using all participants (see Table 4 for results). The second multiple regression was calculated using only non-sex offending delinquents (see Table 5 for results), and the third multiple regression was conducted using only sex offenders (see Table 6 for results). Social desirability was the first block entered in each of the regressions. The F tests in all three regressions were significant and the results

very similar across all three sample configurations indicating a robust finding across the groups: in each regression physical neglect was the only trauma experience that predicted non-sexual criminality in both juvenile sex offenders and non-sex offending delinquents. Physical neglect accounted for 25% to 44% of variability in non-sexual crime across the analyses.

Table 4

Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime: Juvenile Sex Offenders and Non-Sex Offending Delinquents (N = 253)

Variable	B	SE B	β
(Constant)	79.90	20.83	
Impression Management	-.84	.18	-.25*
Self-deception	-1.96	.14	-.08
Emotional Neglect	-1.93	.21	-.06
Physical Neglect	2.24	.33	.48*
Emotional Abuse	.73	.48	.16
Sexual Abuse	.02	.28	.00
Physical Abuse	-.54	.47	-.12

$R^2 = .295$

* $p < .05$

Table 5

Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime: Non-Sex Offending Delinquents (N =70)

Variable	B	SE B	β
(Constant)	74.17	34.69	
Impression Management	-.86	.32	-.27*
Self-deception	-.26	.23	-.11
Emotional Neglect	-.38	.51	-.11
Physical Neglect	2.27	.58	.46*
Emotional Abuse	1.20	1.25	.16
Sexual Abuse	1.42	1.28	.13
Physical Abuse	-.45	.78	-.07

$R^2 = .445$

* $p < .05$

Table 6

Summary of Multiple Regression Analysis for Trauma Experiences Predicting Non-Sexual Crime Total Score: Juvenile Sex Offenders (N = 182)

Variable	B	SE B	β
(Constant)	75.57	27.21	
Impression Management	-.80	.24	-.24*
Self-deception	-.16	.19	-.06
Emotional Neglect	-.16	.25	-.05
Physical Neglect	2.12	.42	.45*
Emotional Abuse	.81	.58	.18
Sexual Abuse	.02	.32	-.00
Physical Abuse	-.62	.60	-.13

$R^2 = .250$

* $p < .05$

Discussion

This study is the first research to explore a wide variety of criminal activities and trauma experiences in the juvenile sex offender and non-sex offending delinquent populations. It is also the first study to find many differences between the groups on non-sexual criminal activity, and highlights the seriousness of juvenile sex offenders overall criminal activity. The study does replicate Taylor (2003) finding that many juvenile sex

offenders also commit many non-sexual crimes. This study also has replicated the results of Burton (2000), Ryan et al. (1996), Romano and De Luca (1997) and Worling (1995) where juvenile sex offenders have significant histories of being sexually abused in childhood and Ryan et al. (1996) for physical abuse. Ford and Linney (1995) are the only researchers that found differences in juvenile sex offenders and non-sex offending delinquents' exposure to traumatic experiences, where the researchers found that juvenile sex offenders were more likely to be physically and sexually abused. This study replicated Ford and Linney's findings and is the first to find differences among the groups in emotional abuse. It is also the first study to find physical neglect as a predictor in engaging in non-sexual crime among both groups.

Juvenile sex offenders were also found to have more exposure to childhood sexual abuse, physical abuse and emotional abuse than non-sex offending delinquents. Exposure to physical and emotional neglect did not differ among the juvenile sex offenders and non-sex offending delinquents. It is unknown why juvenile sex offenders did not differ on exposure to physical and emotional neglect, but did so on many other presumably related traumatic experiences (sexual abuse, physical abuse, and emotional abuse). Some types of traumatic experiences may attack a person's psychological functioning more than others. Physical, emotional and sexual abuse may perhaps be more likely to rob a person's self-esteem and create more feelings of rage and anger because of the intense degree of personal violation that can be associated to them. Feelings of depression, aggression, and low-self worth have been consistently illustrated in the literature on physical, sexual, and emotional abuse (Briere & Elliott, 1994; Dinwiddie et al., 2000; Kaplan, Pelicovitz & Labruna, 1999; Kendall-Tackett, Williams

& Finkelhor, 1993; Lanktree, Briere, & Zaidi, 1991; Lipovsky, Saunders & Murphy, 1989; Litrownick, Newton, Hunter, English & Everson, 2003; Mennen & Meadow, 1994; Osofsky, 1999). These feelings may encourage the abused youth to act out towards other objects more often. As the victim of abuse is not treated with respect by their perpetrators, victims may also have difficulty treating others with respect which may perhaps also account for some of their sexually acting out behavior. Juvenile sex offenders for this reason may commit more personal types of violations because of their own abuse history. All these explanations are hypotheses and need to be researched to be confirmed.

The results in this state-wide sample indicate that juvenile sex offenders are much more serious delinquents than non-sex offending because they are shown to engage in more non-sexual criminal behavior than non-sex offending delinquents who also have high rates of engagement in criminal activity. Juvenile sex offenders also seem to participate in a wide range of crimes, such as sex offending, assault, theft and property damage, which are all very different types of crime. The fact that juvenile sex offenders participate in a large amount of non-sexual crime (often more than non-sexual delinquents) illustrates the importance of not just treating the sex offending behavior but also all their delinquent behavior. It is unclear why robbery was not found significant, especially when felony theft was. The fact that robbery was not measured very well (only based on one item) may account for the lack of difference.

Physical neglect was found to be the only predictor of engagement in non-sexual criminal behavior, and it was found for both juvenile sex offenders and non-sex offending delinquents. Neglect seems to be the greatest contributor of the trauma types to overall

delinquency. This is a very important finding as neglect is often overlooked in the literature. Sexual abuse and physical abuse are more often researched in the trauma literature and increasingly in the juvenile sex offending literature and both were not found to be a significant predictor in engagement in non-sexual criminal activity in this study.

Strengths and Limitations

This research was a state wide study that had a large sample size, which makes it good as a preliminary investigation into this new area of research. There are several limitations to this study. The data collected relies on self-reporting, which brings into question the accuracy of each report. Some participants may have falsified the answers to the questions purposefully, or may have difficulty remembering and accounting for their past behavior due to the nature of their own abuse or the fear surrounding having committed abuse. The study did, however, control for social desirability and impression management to help counter those falsifying their answers. Other limitations of the study are that it relies on retrospective reporting and the sample was not randomly selected. The robbery scale used in this study also needs to be improved because it was only based on one item.

Future Directions

More research that explores juvenile sex offenders' engagement in non-sexual crime is supported by this study. This study was a beginning attempt to explore non-sexual crime and its relationship to trauma exposure. The results highlight that physical neglect is perhaps the greatest type of trauma that impacts these youth and is in great need of further research, both to expand upon it and to replicate it. Research needs to be

directed towards understanding the full impact that physical neglect has on delinquents. It would also be beneficial for further research on different types of trauma on all delinquent populations. Although this research only found physical neglect as a predictor of engagement in non-sex offending criminal behavior, other studies may find significant results for other types of trauma experiences upon further investigation. Authors are increasingly reporting that delinquents have a significant trauma history. The importance of this research on trauma and crime can no longer be neglected in the clinical work and in future research with these populations.

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