2015

Differences in Psychosexual Development between Child and Peer Male Juvenile Sex Offenders

Colleen M. Lillard

Follow this and additional works at: <https://researchrepository.wvu.edu/etd>

Recommended Citation

Lillard, Colleen M., "Differences in Psychosexual Development between Child and Peer Male Juvenile Sex Offenders" (2015). *Graduate Theses, Dissertations, and Problem Reports*. 6089.
<https://researchrepository.wvu.edu/etd/6089>

This Dissertation is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Dissertation in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This Dissertation has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.

Differences in Psychosexual Development between Child and Peer Male Juvenile Sex Offenders

Colleen M. Lillard, M.S.

Dissertation defense submitted to
The Eberly College of Arts and Sciences at West
Virginia University

in partial fulfillment of the requirements for the degree of

Doctorate of Philosophy in
Psychology

William Fremouw, Ph.D., ABPP, Chair
Melissa Blank,
Ph.D.

Christi Cooper-Lehki, D.O.

Amy Fiske, Ph.D.

Elisa Krackow, Ph.D.

Karen Weiss, Ph.D.

Department of Psychology

Morgantown, West Virginia

2015

Keywords: Child Offenders, Peer Offenders, Juvenile Sex Offenders, Psychosexual
Development, Multiphasic Sex Inventory

Copyright 2015 Colleen Lillard

Abstract

Differences in Psychosexual Development between Child and Peer Male Juvenile Sex Offenders

Colleen Lillard

Juvenile sex offenders account for approximately 50% of child sex abuse cases and 20% of sexual assault cases in the United States. Researchers, in an attempt to better understand the etiology of this behavior, have examined typologies of juvenile sex offenders, including victimage. Much of the research has compared juveniles who offended against children versus juveniles who have offended against peers/adults. Recent research has also compared these two groups with those juvenile sex offenders who offended against both children and peers (i.e., mixed offenders). Using data from psychological evaluations and the Multiphasic Sex Inventory- II (MSI-II; Nichols & Molinder, 2010), this study compared child offenders (i.e., victims were more than four years younger), peer offenders (i.e., victims were four years younger or less), and mixed offenders (i.e., both child and peer victims) on variables including victim, offender, and offense characteristics, trauma, and psychosexual development. Compared to child offenders, peer offenders had more severe sexual offenses, more prior status/non-violent charges, and more issues with sexual functioning. Of these juvenile sex offenders who reported being sexually abused, child offenders were more likely to have been victimized by a relatives compared to peer offenders. Compared to child offenders and peer offenders, mixed offenders began offending at a younger age and were more indiscriminate, offending against both male and female victims, and relatives and non-relatives. Mixed offenders were also more likely than child and peer offenders to have prior sex offender treatment. Mixed offenders also scored higher on the Child Molestation Scale of the MSI-II compared to peer offenders. Implications for a victim-age based typology of juvenile sex offenders are discussed.

Acknowledgements

I would first like to say thank you to my advisor, Bill Fremouw. Your guidance, support, and encouragement throughout the past five years is very much appreciated. Without you, I would not be standing here today. Thank you for helping make my dream a reality. Thank you also to my fellow lab members, particularly Matt McNally. Matt, I appreciate all your assistance with this project. It's been great working with you over these last few years.

Thank you, also, to all of my committee members, Melissa Blank, Ph.D., Christi CooperLehki, D.O., Amy Fiske, Ph.D., Elisa Krackow, Ph.D., and Karen Weiss, Ph.D., for taking the time out of your busy schedule to help me improve not only this document, but also this project. In particular, I would like to thank Christi Cooper-Lehki for helping make this data collection possible. Thank you also for all of your support and guidance throughout graduate school.

To my husband, Ed, I'm not sure I can ever express how grateful I am to you. Thank you for your constant love and support throughout this long and often stressful road. Thank you also for standing by my side even as this journey continues to move us further away from home. Without you none of this would be possible. We did it!

Finally, to mom, dad, and Megan, thank you for your love and support. Thank you also for listening to all the complaints and believing in me when I did not always believe it myself. With you three behind me I know the possibilities are limitless. I love you all so much.

Table of Contents

Abstract	ii
Acknowledgements	iii
Introduction	1
Child Offenders vs. Peer Offenders	6
Victim Characteristics	6
Offender Characteristics	7
Offense Characteristics	7
Victimization History	8
Psychosexual Development	10
Sexual Knowledge	13
Paraphilic interests	13
Multiphasic Sex Inventory	15
Current Study	17
Purpose 1	18
Purpose 2	19
Purpose 3	21
Method	22
Participants	22
Materials	23
Psychological Evaluation	24
Multiphasic Sex Inventory II (MSI-II)	24
Reliability Procedures	35
Results	35
Purpose 1- Child vs. Peer Offenders: Offender, Offense, and Victim Variables	35
Purpose 2- Child vs. Peer Offenders: Psychosexual Variables	37
Binary Logistic Regression	39
Purpose 3- Child vs. Peer vs. Mixed Offenders	39
Discriminant Function Analysis	42
Discussion	43
Child Offenders vs. Peer Offenders	43
Child Offenders vs. Peer Offenders vs. Mixed Offenders	45
Limitations	48
Theoretical Implications	49
Clinical Implications	51
Future Directions	52
References	54

Differences in Psychosexual Development between Child and Peer Male Juvenile Sex Offenders

Sexual offenses are serious crimes with serious consequences. Sexual offenses are defined as a behavior that includes: “any sexual interaction with person[s] of any age that is perpetrated [a] against the victim’s will, [b] without consent, or [c] in an aggressive, exploitive, manipulative, or threatening manner” (Ryan, 2010, p. 3). For many years, researchers focused solely on adult males who committed sexual offenses. More recently, the literature has been expanded to include juvenile sex offenders. Juvenile sex offenders¹ are adolescents who are under the age of 18 years old when they commit their sexual offense. It is believed that approximately 50% of child sexual abuse (i.e., sexual interaction with someone who is unable to consent; Ryan, 2010) and 20% of sexual assaults (i.e., sexual behavior involving force and usually penetration; Ryan, 2010) are committed by juvenile sex offenders (Barbaree & Marshall, 2006).

At first, researchers believed that adult sex offenders and juvenile sex offenders were the same population. They thought that most juvenile sex offenders become adult sex offenders as they aged. Recent research has refuted this claim with findings that the majority of juvenile sex offenders never reoffend sexually with recidivism rates ranging from 5-15% (Lussier & Blokland, 2014). Using data from all persons born in 1984 in the Netherlands, Lussier and Blokland (2014) examined offense patterns of 21,860 participants who were arrested for an offense between the ages of 12 and 23 years old. They found that of individuals who were arrested for one sexual offense as a juvenile, 3% went on to commit a sexual offense as an adult. Furthermore, of the juveniles arrested for multiple sexual offenses, 12.3% went on to commit

¹ The terms juvenile sex offender and adolescent sex offender are used interchangeably to describe someone under the age of 18 years old who commit a sexual offense. For parsimony, throughout this paper the term juvenile sex offender will be used.

sexual offenses as adults. Finally, 0.5% of adult sex offenders were not arrested for any sexual offenses as juveniles. These findings demonstrate that only a small proportion of juvenile sex offenders continue to offend into adulthood and these juveniles who reoffended in adulthood tended to have committed multiple offenses as juveniles. This research also highlighted the importance of separately examining juveniles who committed multiple sexual offenses from juveniles with one sexual offense.

Given that the literature has found that juvenile sex offenders are a separate population compared to adult sex offenders, researchers have attempted to develop theories specific to the development of sexual offending in adolescence. Researchers have closely examined the influence of family environments of those who act out sexually. Research has also explored childhood sexual abuse and its relation to subsequent sexual offending.

Researchers have closely examined the family environments of individuals who engage in sexually abusive behavior. Barbaree and Langton (2006) summarized the literature and found that these family environments were characterized by

(1) instability and lack of resources, (2) the failure to promote or establish strong emotional bonds particularly between parent and child; (3) early exposure to sexual material and behavior; (4) an environment in which the child is at high risk for sexual abuse or sexual exploitation by an adult; and (5) lack of resources to cope with the effects of child sexual abuse after it has been disclosed. (pp. 60-61)

One way these children are raised in an environment that places them at risk of being victimized is the presence of another sexual abuser. Gray, Busconi, Houchens, and Pithers (1997) found that 62% of their sample of children with sexual behavior problems were raised in a household with another sexual perpetrator.

It has been consistently found in the literature that many juvenile sex offenders were themselves victims of sexual or physical abuse. A recent study found that childhood sexual abuse increased a male participants' risk of sexually offending by 467% (DeLisi, Kosloski, Vaughn, Caudill, & Trulson, 2014). Theories have thus been developed to better explain this phenomenon. One theory, utilizing Bandura's Social Learning Theory (1973), suggests that children model their behaviors off the behavior of the adults in their lives. Specifically with juvenile sex offenders, the adolescents modeled their offending behaviors after the abuse they suffered as children. This could also be extended to modeling of a wide variety of general antisocial behavior (Barbaree & Langton, 2006). In support of social learning theory, Veneziano, Veneziano, and LeGrand (2000) examined juvenile sex offenders who had been sexually abused. They compared the offenses of juvenile sex offenders with these offenders' sexual abuse history and found that many of the juvenile sex offenders offended in similar patterns as their own abuse. Their offenses and abuse histories were similar in age of victim, relationship with victim, and severity of offense.

Despite a high prevalence of juvenile sex offenders having been sexually abused, not all children who are sexually abused later become sexual offenders. To better understand the differences between these two groups of victims, researchers have examined another theory of learning, specifically conditioning. Lambie, Seymour, Lee, and Adams (2002) compared child sexual abuse victims who later sexually offended with other child sexual abuse victims who never sexually offended. They found that the resilient males (i.e., those that did not later sexual offend) were less likely to think about the abuse while masturbating, reported the abuse as less pleasurable, and had more social support from family and friends.

Attachment theory has also been used to explain sexual offending in adolescence. Smallbone (2006) explained that issues with attachment can lead to problems with emotion

regulation, perspective taking, and empathy. Smallbone further explained that these issues in attachment also lead to less differentiation between attachment systems and sexual systems which leads to misinterpretation of situations (e.g., using sex as a means of receiving comfort).

Additionally, there are two integrative models of sexual offending in the literature, the Marshall and Barbaree Model and the Ward and Siegart Model (O'Reilly & Carr, 2006). The Marshall and Barbaree Model proposes that sexual offending begins with poor relationships with parental figures, leading the youth to use disruptive behaviors to get attention. When the child begins school, they are unable to build healthy relationships with peers and adults because they attempt to use disruptive behavior to build relationships. Ultimately this inability to build relationships leads to problems establishing healthy relationships, low self-esteem, lack of empathy, criminal attitudes and behaviors, and distorted thinking that maintains these criminal attitudes and behavior. The Ward and Siegart Model found five separate pathways to sexual offending: "(1) an intimacy-and-social-skills-deficit pathway; (2) a deviant-sexual-script pathway (in which sexual behavior is erroneously equated with the expression of interpersonal closeness); (3) an emotional-dysregulation pathway; (4) an antisocial-cognitions pathway; and (5) a multiple-dysfunctional-mechanisms pathway. (O'Reilly & Carr, 2006, p. 191)"

In addition to developing theories of sexual offending in adolescence, researchers have also developed typologies to compare distinct groups of juvenile offenders. One such comparison group was juvenile sex offenders and juvenile non-sex offenders. Seto and Lalumiere (2010) comprehensively reviewed this literature in a meta-analysis and found that juvenile sex offenders and juvenile non-sex offenders are two distinct groups of offenders. Juvenile sex offenders were more likely to have atypical sexual interests and a history of sexual victimization compared to juvenile non-sexual offenders. Also, juvenile sex offenders were less likely to have a criminal history, antisocial tendencies, and a substance abuse history.

Researchers have further explored the etiology of juvenile sex offending by comparing juvenile sex offenders who offended against children with those juvenile sex offenders who abused peers/adults. This comparison was first explored in the adult sex offender literature where it was found that rapists (peer/adult offenders) tended to begin offending later in life ($M = 16.3$ years) compared to child molesters ($M = 14.1$ years; Simons, Wurtele, & Durham, 2008). Simons and colleagues (2008) also found that child molesters experienced more sexual abuse, earlier pornography exposure and earlier masturbation. Additionally, rapists tended to have experienced more physical abuse. Additional research comparing adult rapists and child molesters have found that adult sex offenders who offended against adults (usually women) shared many general delinquency characteristics with non-sexual adult offenders (Lalumiere, Quinsey, Harris, Rice, & Trautrimas, 2003; Seto, 2008).

In the juvenile sex offender literature, the distinction between child and peer offenders has been defined three ways: *age only*, *age-discrepancy only*, or *age and age-discrepancy definitions* (for a complete list of definitions see Keelan & Fremouw, 2013). *Age only* definitions are those in which only the age of the victim is considered (e.g., victim is "age 11 or below", Hsu & Starzynski, 1990, p. 25). *Age-discrepancy only* definitions are those which examine the age difference between the offender and victim (e.g., victim is "at least four years younger than offender"; Faniff & Kolko, 2012, p. 240). Age discrepancy definitions ranged from a three to five year age difference. Lastly, *age and age-discrepancy* definitions are those which consider both the victim's age and the difference in age between the victim and offender (e.g., "victim is under 12 years old and 3 years younger than the offender"; Aebi, Vogt, Plattner, Steinhausen, & Bessler, 2012, p. 269). One study used 10 years old and a three year age difference, however all other age and age-discrepancy definitions used 12 years old and either a three or a four year age difference (e.g., Parks & Bard, 2006; Skubic-Kemper & Kistner, 2007). The literature has been

evenly split between using a *discrepancy only* definition and an *age and age-discrepancy* definitions. Skubic-Kemper and Kistner (2010) compared different combinations of the definitions and concluded that these alterations in definitions were not very influential in explaining differences between groups.

Finally, child and peer offenders have been compared on a variety of characteristics including offender, offense and victim characteristics as well as psychosexual development. Offender characteristics studied include offender age and race. Type of offense, amount of force, weapon and/or alcohol/drugs used were offense characteristics previously explored. Lastly, victim characteristics studied include victim relationship with the offender, victim age, and victim gender. Furthermore, comparisons have been made between child and peer offenders on trauma history. The following sections summarize the current literature comparing child and peer juvenile sex offenders (see Keelan & Fremouw, 2013 for a thorough summary and critique). Given the lack of research comparing child and peer offenders on psychosexual variables, a brief review of literature examining sexual knowledge, paraphilic interests, and the Multiphasic Sex Inventory-II (MSI-II; Nichols & Molinder, 2002) is included.

Child Offenders vs. Peer Offenders

Victim characteristics. Studies have thoroughly examined victim characteristics including the victim's relationship to the offender, number of victims, frequency of offending, and victim's gender. Peer offenders tended to have more victims, whereas child offenders tended to offend one victim multiple times (Awad & Saunders, 1991). Both child and peer offenders victimized acquaintances, however child offenders were more likely to offend against a relative compared to peer offenders (Aebi et al., 2012; Fanniff & Kolko, 2012; Gunby & Woodhams, 2010; Hendriks, & Bijleveld, 2004; Richardson, Kelly, Bhate, & Graham, 1997; Skubic-Kemper & Kistner, 2007).

With regard to victim gender, research has found that peer offenders tended to exclusively offend against female victims, whereas child offenders tended to be more indiscriminate with a larger proportion offending against male victims (e.g., Fanniff & Kolko, 2012; Gunby & Woodhams, 2010; Richardson et al., 1997).

Offender characteristics. Studies of offender characteristics have compared peer and child offenders on age and race. Results varied, with some finding no differences between peer and child offenders based on their age (e.g., Ford & Linney, 1995; Hunter, Hazelwood, and Slesinger, 2000) and other studies finding that peer offenders were older than child offenders (e.g., Hendriks & Bijleveld, 2004). Similarly, results of the offender's race were mixed with two studies finding no difference in race between child and peer offenders (Carpenter, Peed, & Eastman, 1995; Ford & Linney, 1995). Other research has found that child offenders were more likely to be Caucasian while peer offenders were more likely to be African American (Hunter et al., 2000; Van Wijk, van Horn, Bullens, Bijleveld, & Doreleijers, 2005).

Offense characteristics. Research has compared many characteristics of the offense including: type of offense, prior sexual and non-sexual arrests, location, alcohol/drugs used, weapons used, and amount of force. Peer offenders tended to be more likely to offend in a public place, compared to child offenders who were more likely to offend in a residential or foster home (Richardson et al., 1997). In regard to weapons or alcohol/drugs used during the offense, child and peer offenders did not differ (Hsu and Starzynski, 1990; Hunter et al., 2000). Finally, it has consistently been found that peer offenders used more force during their offenses compared to child offenders (Hart-Kerkhoffs, Doreleijers, Jansen, van Wijk, and Bullens, 2009; Hunter et al., 2000).

Less consistent results have been found when comparing prior charges. For example, Hunter, Figueredo, Malamuth, and Becker (2003) examined 182 boys (ages 12-18 years old)

adjudicated for sexual offenses at a variety of public and private treatment centers in the United States and found no difference between child and peer offenders based on prior sexual arrests. They also found that child offenders were more likely to have previously been adjudicated for a non-sexual charge compared to peer offenders. In contrast, Hendriks and Bijleveld (2004) examined 116 male adolescents from the Netherlands who were being prosecuted for a sexual offense and found that child offenders were more likely to have a previous sexual offense charge compared to peer offenders.

Victimization history. Abuse history, particularly a sexual abuse history has been a prominent variable examined in both the adult and juvenile sex offender literature. Adult sex offenders who perpetrated against children were more likely to have been sexually abused themselves compared to adult sex offenders who perpetrated against adults (Jespersion, Lalumiere, & Seto, 2009; Simons et al., 2008). Furthermore, Simons and colleagues (2008) found that offenders who abused children were victimized at a younger age ($M = 8.3$ years) compared to those with an abuse history who offended against adults ($M = 11.4$ years). Conversely, those who offended against adults were more likely to have been physically abused and exposed to domestic violence in the past compared to those who offended against children. Simons and colleagues also reported that those who offended against children were more likely to have been victimized by male perpetrators.

Similarly, juvenile sex offenders who offended against children were more likely to have been sexually abused than juvenile sex offenders who offended against peers (Awad & Saunders, 1991; Ford & Linney, 1995; Seto & Lalumiere, 2010). Additionally, juvenile sex offenders who had been sexually abused offended earlier than those without a history of sexual abuse (Murphy, DeLillo, Haynes, & Steere, 2001; Richardson et al., 1997). Furthermore, juvenile sex offenders with a history of sexual abuse were more likely to offend boys (Murphy et al., 2001; Worling,

1995b). One study comparing the perpetrators of the abuse suffered by the juvenile sex offenders found that the child offenders tended to be abused by men, whereas the peer offenders in their sample were often abused by women (Worling, 1995a). Finally, research suggests that juvenile sex offenders with an abuse history perpetrate their sexual offense in a manner similar to the abuse they endured (Burton, 2003, Veneziano et al., 2000).

Grabell and Knight (2009) examined a sensitive period between ages 3 and 7 years old, which was the age range where being sexually abused made an individual more likely to become a sexual offender in the future. This sensitive period predicted atypical sexual fantasies in the future. They hypothesized that this age range was predicted of sexual fantasy because developmentally this is the time period where children begin to develop impulse control and emotion regulation.

Psychosexual Development of Juvenile Sex Offenders

Surprisingly, little research has examined sexual development of juvenile sex offenders. Seto and Lalumiere (2010) found 17 studies (out of 57 in the meta-analysis) which compared the sexual development between juvenile sex offenders and juvenile non-sex offenders. They divided the studies into three categories: sexual experiences (e.g., age at first intercourse), exposure to sex or pornography (e.g., age at first exposure to pornography, exposure to adults having sex), and atypical sexual interests (e.g., bestiality, voyeurism, exhibitionism). This metaanalysis did not find differences between juvenile sex offenders and juvenile non-sex offenders on age at first intercourse; although Seto and Lalumiere cautioned that some studies may have included sexual abuse experiences whereas other studies may not have included abusive experiences. They also found a small group difference in pornography exposure with juvenile sex offenders having more experience with pornography compared to juvenile non-sex offenders. Lastly, they found that juvenile sex offenders had more atypical sexual interests,

fantasies, and behaviors. They were unable to make victim-age based comparisons due to a small number of studies examining sexual development.

Simons et al. (2008) compared the sexual development of 280 adult male sex offenders who abused children with those who abused adults. In regards to sexual development, those who offended against children were more likely than those who offended against adults to have been exposed to pornography before the age of 10 years and to masturbate more often before the age of 11 years. They also found that on average, masturbation began less than one year after abuse occurred. Additionally, those who offended against children were more likely to engage in bestiality and to begin engaging in sexual acts with animals at a younger age (child victim = 12.0 years; adult victim = 14.6 years).

To date, only two studies have compared child and peer juvenile sex offenders on their psychosexual development. Hart-Kerkhoffs and colleagues (2009) compared three groups of Dutch juvenile sex offenders: child offenders (i.e., "children [below the age of 12] who were four or more years younger than the offender", p. 3, $n = 30$), solo peer offenders (i.e., "offenders who had raped or sexually assaulted peers [at least twelve years old] or older persons on their own", p. 3, $n = 54$), and group peer offenders (i.e., "offenders who had raped or sexually assaulted peers [at least twelve years old] or older persons in a group, consisting of [at least] two or more offenders", p. 3, $n = 90$).

Hart-Kerkhoffs and colleagues examined the following areas of sexual development: sex education, sexual preoccupation, deviant sexual fantasies, sexual excitement during offense, deviant sexual behavior, previous sex offenses, history of sexual victimization, sexualizing family, deviant sexual attitudes/perversities, and global assessment of psychosexual development. They found that child offenders were more likely to have male victims with whom

they were acquainted whereas peer offenders (both solo and group) were more likely to have female, stranger victims. Also, group peer offenders denied their offenses at a higher rate than solo peer offenders or child offenders. Additionally, group peer offenders used more force during their offense compared to child and solo peer offenders. Group and solo peer offenders both used more excessive force compared to child offenders. They found no differences between groups on taking responsibility, lack of empathy, or insight into triggers.

Sex education, sexual preoccupation, deviant sexual behavior, and previous sex offenses also did not differ between groups. Child and group peer offenders had more deviant sexual fantasies compared to solo peer offenders. Child offenders also had more sexual excitement than both peer offender groups. Child offenders reported more sexual victimization compared to group peer offenders. Overall, this study showed promising results in regard to differences between child and peer offenders on psychosexual variables.

Recently, Leroux, Pullman, Motayne, and Seto (2014) compared 159 child offenders ($n = 88$), peer offenders ($n = 49$), and mixed offenders ($n = 22$) from data collected between 1988 and 2010. The variables of psychosexual development they used were age of puberty, age of consensual intercourse, use of mainstream pornography use of atypical pornography and reported atypical sexual fantasies. They also used phallometric testing (i.e., measurement of penile circumference in response to explicit audio and visual stimuli). They found that peer offenders and mixed offenders reported more experiences of consensual intercourse and use of mainstream pornography than child offenders. Mixed offenders reported more atypical sexual fantasies compared to child and peer offenders. Furthermore, none of the groups differed in atypical phallometric testing results. This study demonstrated a need for further exploration of psychosexual variables and comparisons of child, peer, and mixed offenders.

Sexual Knowledge

Few studies have examined sexual knowledge of normative or sexually abusive adolescents. In one study examining a normative sample of French adolescent boys ($N = 248$; M age = 14 years), Mallet & Herbe (2011) explored whether sexual knowledge predicted rape supportive beliefs. They found that sexual knowledge did predict rape supportive beliefs over and above academic performance (i.e., their measure of general intelligence).

Only one study to date has examined the sexual knowledge of juvenile sex offenders. Whittaker, Brown, Beckett, and Gerhold (2006) compared the sexual knowledge of 221 juvenile sex offenders who offended against children with 55 non-offending adolescent boys. They used the Sexual Knowledge and Beliefs Scale along with the Social Sexual Desirability Scale on the MSI to assess this knowledge. They found that the non-offending sample had more sexual knowledge than the juvenile sex offenders. They also found that non-offenders had more socially desirable answers. No research has compared juvenile sex offenders who offended children versus those who offended against peers on level of sexual knowledge.

Paraphilic interests

Atypical sexual interests in general have been found to differentiate juvenile sex offenders from juvenile non-sexual offenders (Seto & Lalumiere, 2010). In an attempt to better understand the pathways associated with atypical sexual interests, Maniglio (2011) concluded that in juvenile sex offenders, deviant sexual fantasies come from childhood traumatic experiences, psychological disorders, and a lack of effective coping strategies. They further stated that these fantasies provide a means for coping (i.e., self-soothing).

Zolondek, Abel, Northey, and Jordan (2001) compared juvenile sex offenders and adult sex offenders on a variety of paraphilias. They found that juvenile sex offenders reported more fetishism, obscene phone calls, child molestation, and phone sex. In contrast, they found that

juvenile sex offenders, compared to adult sex offenders, reported less bestiality. Lastly, they found no differences between juvenile and adult sex offenders on the following paraphilias: exhibitionism, voyeurism, masochism, sadism, use of pornography, and transvestitism. They found that the percentage of juvenile sex offenders with these paraphilias ranged from 1 and 2% (i.e., masochism and sadism) to 60% (i.e., child molestation) with this arousal beginning around the age of 11 years.

In another study examining paraphilias with juvenile sex offenders, Zakireh, Ronis, and Knight (2008) found that juvenile sex offenders placed at a residential facility reported more paraphilias than juvenile sex offenders at an outpatient placement. Overall, juvenile sex offenders at outpatient placements had paraphilic interests more similar to juvenile non-sex offenders than they did to juvenile sex offenders at residential placements. No study has compared juvenile sex offenders who abused children with those who abused peers on specific paraphilias.

The above reviewed variables have been assessed in a variety of ways. Many studies relied on records reviews of psychological evaluations or self-report questionnaires created for the study. Another way to measure some of the above mentioned variables is through self-report measures that are standardized and include multiple validity scales. The Multiphasic Sex Inventory, described below, is one such standardized measure. It is a popular measure to assess a variety of characteristics of those individuals who have sexually offended.

Multiphasic Sex Inventory

The Multiphasic Sex Inventory (MSI; Nichols & Molinder, 2010) is a lengthy self-report measure assessing a wide variety of characteristics of adult and juvenile sex offenders. The original MSI was published in 1984 for adult male offenders, and in 2000, Nichols and Molinder released the MSI-II Adult Male form along with the MSI-II Adolescent Male form (Nichols &

Molinder, 2010). While the MSI-II is a well respected and often used assessment measure in treatment facilities for adult and juvenile sexual offenders, there is very little empirical research available. Most of the current research has examined the MSI-II with adult offenders. Only two studies have examined juvenile sex offenders on the MSI Adolescent Form and one of those studies only examined the Sexual Knowledge and Belief Scale (Whittaker et al., 2006). In the adult sexual offender literature, the MSI has been shown to be a valuable measure of sexual beliefs and behaviors (Kalmus & Beech, 2003; Mackaronis, Strassberg, & Marcus, 2011; Schlank, 1995; Stinson & Becker, 2008).

In one such study, Schlank (1995) attempted to cluster adult sexual offenders using the MSI and victim characteristics. Schlank compared 165 adult male sexual offenders who had offended against adults (44%), children (54%), or both (2%). Schlank examined a variety of scales on the MSI including the Social Sexual Desirability Scale, the Lie Scale, Sexual Dysfunctions Scale, Sexual Knowledge Scale, Cognitive Distortions Scale, Justifications Scale, and Paraphilias Scale. Seven reliable clusters were found. Cluster 1 included individuals who molested female children and who had high scores on the Social Sexual Desirability Scale, and low scores on both the Sexual Obsessions and Paraphilias scales. Cluster 2 was individuals who molested male relative and other children. They had low scores on all three measures of the MSI, Social Sexual Desirability, Sexual Obsessions, and Paraphilias. Cluster 3 was individuals who offended against adult women and they had high scores on the Social Sexual Desirability and Sexual Obsessions scales, and mid-range scores on the Paraphilias scale. All scores were in the mid-range for individuals in Cluster 4 who offended against female relatives and children. Individuals who offended against adult women and who had high scores on the Social Sexual Desirability and Paraphilias scales along with mid-range scores on the Sexual Obsessions scale were in Cluster 5. Cluster 6 was individuals who assaulted adult women and had mid-range

scores on the Social Sexual Desirability scale and low scores on the Sexual Obsessions and Paraphilias scales. Finally, Cluster 7 was made up of individuals who offended against male and female children and adult women and had high scores on the Social Sexual Desirability scale and mid-range scores on both the Sexual Obsessions and Paraphilias scales.

Other findings include: child offenders had lower scores on bondage and sadism subscales compared to those who offended against adults. Also, those who offended against adults were more likely to have a prior non-sexual conviction compared to those who offended against children. In conclusion, the scales on the MSI were useful in subtyping adult male sexual offenders.

The MSI-II has also been compared with other measures of personality and sexual interest and found to be comparable. Stinson & Becker (2008) used the MSI-II along with the penile plethysmograph, Abel Assessment of Sexual Interest, and Psychopathy Checklist-Revised with 60 sexually violent predators. They found that subscales of the MSI-II (i.e., Child Molester scale, Rape Scale, Exhibitionism Scale, Voyeurism Scale) were significantly correlated with the other three measures. They also found that each of those subscales was highly correlated with the corresponding behavior. These correlations were higher than the correlations of those behaviors with the other measures. Finally, the original MSI has been used to examine pedophilia as a dimensional construct (Mackaronis et al., 2011), and the MSI Sexual Obsession scale has been found to predict recidivism at 2 (AUC = .85) and 5 years (AUC = .75; Craig, Browne, Beech, & Stringer, 2006).

Recently, Drimeyer, Spehr, Yoon, Richter-Appelt, and Briken (2013) compared 32 juvenile sex offenders with 32 age-matched juvenile violent non-sexual offenders on a variety of MSI-II scales. They found that juvenile sex offenders scored higher than juvenile violentnonsexual offenders on the following scales: sexual inadequacies, rape scale,

exhibitionism scale, and obscene calls. Juvenile sex offenders scored lower than juvenile violent non-sexual offenders on the social sexual desirability scale. Offenders did not differ on a large number of MSI-II scales including: sexual obsessions, gender orientation, gender identity, sexual knowledge and beliefs, physical disabilities, impotence, child molestation scale, fetishism, voyeurism, sad-masochism, and bondage and discipline.

Current Study

The current project is a two group archival study of juvenile sexual offenders based on a records review using psychological evaluations and the Multiphasic Sex Inventory-II (MSI-II; Nichols & Molinder, 2010). Juvenile sex offenders were categorized as either child or peer offenders based on the age-discrepancy between themselves and their victim during their index offense. Child offenders were defined as offenders whose victims were more than four years younger than them at the time of the offense. Peer offenders were defined as offenders whose victims were up to four years younger, the same age, or older than the offender.

For exploratory analyses, a third category of offenders, mixed offenders, was also examined. Mixed offenders were defined as offenders who victimized both children and peers based on all victims reported in the earliest psychological evaluation. Although this is an important category, only 4 of the 22 studies reviewed by Keelan and Fremouw (2013) included a mixed offender sample (Fanniff & Kolko, 2012; Parks & Bard, 2006; Richardson et al., 1997; Skubic-Kemper & Kistner, 2007). Since the publication of Keelan & Fremouw, 2013, one additional study has examined mixed offenders, Leroux and colleagues (2014). **Purpose 1. Do child and peer offenders differ in victim, offender, and offense characteristics?** Previous research has examined a variety of characteristics of the victim, offender, and offense in relation to child and peer offenders. This study attempted to clarify results on variables such as prior charges, age at offense, victim gender, and victim relationship to the offender.

Purpose 1 Hypotheses.

1.1. Using data from the psychological evaluation, it was predicted that child offenders would offend against boys more frequently than peer offenders. In contrast, peer offenders would be more likely to offend exclusively against girls than child offenders (e.g., Aebi et al., 2012; Fanniff & Kolko, 2012).

1.2. Also using data from the psychological evaluation, it was predicted that child offenders would offend against relatives more frequently than peer offenders. In contrast, peer offenders would be more likely to offend against acquaintances and strangers than child offenders (e.g., Aebi et al., 2012; Fanniff & Kolko, 2012).

1.3. Examining offender characteristics using the psychological evaluation, it was predicted that child offenders would be younger at age of first offense than peer offenders (Hendriks & Bijleveld, 2004).

1.4. Using the psychological evaluation and the Offense Severity Index presented by Aylwin, Clelland, Kirkby, Reddon, Studer, and Johnston (2000), it was predicted that peer offenders would engage in more severe offenses. The highest score on the Offense Severity Index includes offenses with excess force (e.g., weapons, physically abusive behavior) and because previous research has found that peer offenders use more excess force compared to child offenders, it was predicted that they would therefore engage in more severe offenses.

Purpose 2. Do peer and child offenders differ in their psychosexual development?

Given that only two studies have compared child and peer offenders in terms of their psychosexual development and only two other studies have used the MSI-II Adolescent form, this purpose was more exploratory. Hart-Kerkhoffs et al. (2009) found that child offenders had more deviant sexual fantasies than solo peer offenders and more sexual excitement than both peer offender groups. This project attempted to expand upon these findings by examining a wide

variety of areas of psychosexual development. In regard to sexual knowledge, the same questionnaire, presented by Whittaker and colleagues (2006) was used (i.e., MSI-II), except this project compared child and peer offenders rather than juvenile sex offenders and juvenile nonoffenders.

Research has consistently found that child offenders were more likely to have been sexually abused than peer offenders (Awad & Saunders, 1991; Ford & Linney, 1995; Seto & Lalumiere, 2010). It has also been found that those offenders with an abuse history were more likely to have offended male victims (Murphy et al., 2001; Worling, 1995b). This project tested the previous findings about sexual abuse. Additionally, Worley (1995a) examined juvenile sex offenders with an abuse history and further examined the gender of the perpetrator. Interestingly they found that child offenders tended to be victimized by men, and peer offenders tended to be victimized by women. Given their very small sample size ($N = 7$), this study tested these findings with a larger sample.

Finally, Grabell and Knight (2009) found that a sexual abuse history predicted sexual fantasies for those victimized between the ages of 3 and 7 years old. They further described this age period as a possible sensitive period in which sexual abuse can lead to sexually abusive behavior. This project attempted to replicate these findings.

Purpose 2 Hypotheses.

2.1. Using the MSI-II Sexual Deviance Scales and Additional Paraphilias Indices, it was predicted that child offenders would have more deviant sexual interests (i.e., more paraphilic interests) than peer offenders (Hart-Kerkhoffs et al., 2009).

2.2. Using the MSI-II Sexual Knowledge and Belief Scale, it was predicted that peer offenders would be more like juvenile non-sexual offenders and therefore have more sexual knowledge compared to child offenders (Whittaker et al., 2006).

2.3. Using the MSI-II to further explore other variables of psychosexual development, analyses were exploratory and therefore did not have directional hypotheses.

2.5. Using the psychological evaluation, it was predicted that child offenders were sexually abused at a higher rate than peer offenders (Awad & Saunders, 1991; Ford & Linney, 1995; Seto & Lalumiere, 2010).

2.6. Also using the psychological evaluation, it was predicted that child offenders with an abuse history were victimized by male perpetrators, whereas peer offenders with an abuse history were victimized by female perpetrators (Worley, 1995a).

2.7. Finally, using the psychological evaluation, it was predicted that child and peer offenders with a sexual abuse history would be more likely to have been sexually abused between the ages of 3 and 7 years old (Grabell and Knight, 2009).

Purpose 3. General Exploratory Analyses.

Previous research has found that mixed offenders are more likely to offend male victims as well as relatives, similar to child offenders (Fanniff & Kolko, 2012). Parks and Bard (2006) found that mixed offenders exhibited the highest scores in sexual preoccupation on the Juvenile Sex Offender Assessment Protocol-II (J-SOAP-II; Prentky & Righthand, 2003; a risk assessment measure for juveniles suspected or charged with sexual offenses). Finally, Richardson et al. (1997) found that mixed offenders began offending at a younger age, created more victims, and offended longer than peer or child offenders. Mixed offenders were also more likely to have been sexually abused compared to child and peer offenders (Richardson et al., 1997).

Purpose 3 Hypotheses.

3.1. Using the psychological evaluation, it was predicted that mixed offenders would offend against more male victims than peer offenders, but offend against male victims similar to child offenders (Fanniff & Kolko, 2012).

3.2. Also using the psychological evaluation, it was predicted that mixed offenders would offend against strangers more than child offenders. It was also predicted that mixed offenders would offend against relatives more often than peer offenders (Richardson et al., 1997).

3.3. Given that no study has compared child, peer, and mixed offenders on measures of psychosexual development, there were no directional hypotheses.

Method

Participants

Data was collected from two juvenile facilities in West Virginia, Chestnut Ridge Center and the Dr. Harriet B. Jones Treatment Center. Chestnut Ridge Center has a 15-bed Specialized Residential Treatment Program for males between the ages of 13 and 21 years old with a history of sexually abusive behavior. Most residents are adjudicated by the courts for sexual offenses, but adjudication is not mandatory ("Child & Adolescent Services," n.d.). The Dr. Harriet B. Jones Treatment Center was a 38-bed, state-operated correctional-based sex offender specific treatment facility. Residents of this facility included adjudicated males between the ages of 13 to 21 years old with a history of sexually abusive behavior as their primary offense ("Dr. Harriet B. Jones Treatment Center," n.d.).

Participants in this study included males who were adjudicated for committing hands-on sexual offenses prior to turning 18 years old. These juvenile sex offenders were adjudicated to Chestnut Ridge Center from 2006-2013 and from the Dr. Harriet B. Jones Treatment Center between 2010-2013. These dates reflect the time period when the MSI-II was administered at each facility (C. Cooper-Lehki, personal communication, August 21, 2013). An exhaustive sample of individuals adjudicated to either Chestnut Ridge Center or the Dr. Harriet B. Jones Treatment Center was collected with a total sample size of 110 participants. See Figure 1 for visual depiction of participant inclusion and exclusion. Of the 110 participants, 74 participants

had both a psychological evaluation and MSI-II profile form available, therefore all further analyses are based on 74 participants². Table 1 displays the number of participants at each facility by two comparison groups based on index offense whereas Table 2 displays the number of participants at each facility by three comparison groups based on all offenses noted in the psychological evaluation.

Participants were classified as a child offender if the age difference between them and their victim was greater than 4 years³ (e.g., offender is 15 years old and the victim is 10 years old). Participants were classified as a peer offender if the age difference between them and their victim was at most 4 years (e.g., offender is 15 years old and victim is 11 years old). Groups were classified from their index offense as found in the first psychological evaluation on file. For further exploratory analyses, participants were categorized based on all victims as reported in the first psychological evaluation on file. Participants were divided into three independent groups: child offenders (i.e., all victims were more than 4 years younger than the offender), peer offenders (i.e., all victims were at most 4 years younger than the offender, the same age, or older than the offender), and mixed offenders (i.e., both child and peer victims).

Materials

For this study, profile forms from the MSI-II (Nichols & Molinder, 2002) and psychological evaluations were collected from the mental health treatment records of juveniles at the Chestnut Ridge Center and the Dr. Harriet B. Jones Treatment Center. A number of offenders

² Of the missing MSI-II, 8 were from Harriet B. Jones, 5 were from Chestnut Ridge Center (2 participants may have been too low functioning to complete); of the missing Psyc Evaluations, 8 were from Harriet B. Jones and 8 were from Chestnut Ridge Center, and of the missing both, 6 were from Harriet B. Jones center and 1 was from Chestnut Ridge Center. The higher amount of missing data from Harriet B. Jones could be accounted for by the closing of the facility and data being misplaced in the storage facility. Overall, it suggests the missing data is missing at random. ³ A four year age differences was used because it is the most common age difference used in previous literature and it is also the legal definition in many jurisdictions.

were placed at to both facilities, and data was collected based on the first location in which both the MSI-II and psychological evaluation were found.

Psychological Evaluation. Every adolescent adjudicated to either facility was required to have a psychological evaluation conducted every two years. Psychological evaluations were conducted by a variety of mental health professionals including psychologists, psychiatrists, and/or WVU psychology graduate students. Psychological evaluations included varying amounts of information but generally they included a clinical interview with a full clinical history as well as testing including intelligence testing and personality testing. Variables collected from the first psychological evaluation included: demographic characteristics (i.e., date of birth and ethnicity); offender, offense, and victim characteristics (i.e., offender age at offense, victim age at offense, victim gender and relationship to the offender, & details of the offense including the behavior, weapon and alcohol/drug use); prior offenses (i.e., sexual, violent, non-violent, & status); and abuse history (i.e., sexual, physical, emotional, neglect, witnessing domestic violence including relationship of offender to perpetrator, and age of offender).

The Offense Severity Index by Aylwin and colleagues (2000) was used to examine severity of offenses. This severity index ranged from 1 to 6 where level 1 is clothed fondling, voyeurism, and obscene phone calls; level 2 is clothes off fondling, exhibitionism, frotteurism, digital penetration, and masturbation; level 3 is oral sex; level 4 is vaginal intercourse; level 5 is anal intercourse and gang rape; and level 6 is offenses with brutality including severity level 2-5 offenses with a weapon or extreme force. A data coding sheet was used to collect this information from the psychological evaluations (see Appendix A).

Multiphasic Sex Inventory II (MSI-II). The MSI-II is a lengthy, self-report instrument composed of a battery of measures examining a variety of attitudes, behaviors, and emotions for individuals accused of committing sexual offenses (Nichols & Molinder, 2010). The original

MSI was published in 1984 for adult male offenders. It was normed on 140 child molesters, 30 rapists, and 20 exhibitionists. In 2000, Nichols and Molinder released the MSI-II Adult Male form which included many of the original scales but with revised questions and a larger standardized sample. This standardized sample included 2000 individuals matching the 1990 census (Nichols & Molinder, 2010). In addition to the MSI-II Adult Male form, Nichols and Molinder constructed the MSI-II Adult Female Form, MSI-II Adolescent Male Form, and MSI-II Adolescent Female form. For the purpose of this study, the MSI-II Adult Male Form and the MSI-II Adolescent Male Form were used.

The MSI-II Adult Male Form is a 560 item true/false measure that assesses a variety of sexual characteristics of adult men alleged to have committed sexually abusive/assaultive behavior. Similar to the Adolescent Male form, the measure takes approximately 90 minutes to complete and requires a 7th grade reading level. The questionnaire must be sent away for scoring and interpretation by the creators and they send back a four page profile form. This profile form was used for all data analyses.

The MSI-II Adolescent Male Version is a 559 item true/false measure that assess a variety of sexual characteristics of juveniles (ages 12-19 years) alleged to have committed sexually abusive behavior (Nicholas & Molinder, 2010). The measure takes approximately 90 minutes to complete and requires approximately a 7th grade reading level. The questionnaire must be sent away for scoring and interpretation by the creator and they send back a four page profile form. The MSI-II Adolescent Male Version was normed from a sample of 1200 adult male child molesters and 460 adolescent male child molesters in the United States. The sample of adolescents ranged in age from 12 to 19 years with 76% of the sample being Caucasian. The

adult sample was used so that comparisons could be drawn between the adolescent and adult versions of the MSI-II.

Due to the sample population available, along with the small sample size, both the MSI II Adolescent Male and the MSI II Adult Male forms were used in this study, depending on the age of the participant at the time they completed the measure. The MSI-II Adolescent Male form includes the same questions and similar profiles to the MSI-II Adult Male form. The following sections describe the measures included in this study from the MSI-II.

Validity scales. Information from five validity scales was collected including the Repeated Items scale, Social Sexual Desirability scale, Sexual Obsessions scale, Dissimulation scale, and Lie scale.

Repeated items scale. Fifteen items are repeated throughout the MSI-II and this scale detects carelessness. Scores between 5 and 6 denote inconsistent responding whereas scores of 7 and 8 denote questionable validity and scores 9 or above equal an invalid MSI-II.

Social sexual desirability scale. This is a scale which examines the degree to which participants try to portray themselves sexually in a favorably way. It consists of 30 items which are endorsed by most males in the community (e.g., "I like sex play"; Nichols & Molinder, 2002). Nichols and Molinder (2002) found that this scale was significantly correlated with the MMPI Lie scale ($r = -.47$) and the Marlow-Crowne Social Desirability Scale ($r = -.75$). They concluded that this is good measure of "faking good" (Nichols & Molinder, 2002). Participants with scores of 19 or less are considered to be highly defensive. It is noted that scores of 15 or less are considered to be suppressed when the Dissimulation scale is elevated. Internal consistency of this scale ranged from .77 to .88 with child molesters, rapists, and exhibitionists.

Sexual obsessions scale. This is a 20 item measure of an individual's obsession with sex with 15 present tense items and 5 past tense items. Nichols and Molinder (2002) noted that sex

offenders should score at least a 2 on this measure. Participants with scores ranging from 11-14 are thought to have a preoccupation with sex and those with scores between 15 and 17 are considered obsessed with sex. Scores of 0 to 1 suggest that the participant is “faking good.” On the other end of the spectrum, scores of 18-20 denote an individual who is “out of control sexually” or “faking bad” (Nichols & Molinder, 2002). Internal consistency of this scale ranged from .88-.93 with child molesters, rapists, and exhibitionists.

Dissimulation scale. This is a 20 item scale which examines openness of the participant. Scores of 15 or greater suggest that the participant is “faking good” (Nichols & Molinder, 2002). Internal consistency ranged from .80 to .83 for child molesters, rapists, and exhibitionists.

Lie scale. The Lie scale is a 14 item scale with scores ranging from valid sexual disclosure to highly sexually suppressed. It is only used with individuals who admit to sexually offensive behavior. It examines willingness to discuss atypical sexual interests. Nichols and Molinder found that individuals with high scores on the Lie scale will have suppressed scores on the Paraphilias scale. Participants with scores from 0-2 are said to be highly disclosing. Internal consistency ranged from .80 - .90.

Information & Referral Issues. This group of measures includes sexual knowledge, a suicide index, and sexual ethics.

Sexual Knowledge and Beliefs Scale. This is a 24 item measure of an individual's knowledge of “sexual anatomy and physiology” (Nichols & Molinder, 2002). Scores of 17 or less indicate a deficit in this knowledge. Nichols and Molinder (2002) noted that high scores tend to be a “crude measure of intellectual ability.” Items on this measure include: “Unlike most men, women are capable of having multiple (many) orgasms during sex” (Nichols & Molinder, 2002). Internal consistency of this measure ranged from .58-.64 for child molesters, rapists, and exhibitionists.

Suicide Index. This is a 12 item measure assessing depressive symptoms and suicide ideation and planning. Seven items pertain to depressed mood and poor body image. Five items examine past suicide attempts, hopelessness, and a current suicide plan. Items on this measure include: "Lately I have been having thoughts of how I might kill myself" (Nichols & Molinder, 2002).

Sexual Ethics Index. This index is comprised of two subscales, Child Sex and Forced Sex, both of which have scores ranging from 0-2 with high scores indicating an understanding that sexual behavior is wrong (i.e., sexual behavior with children is wrong). Internal consistency for this measure ranged from .65 - .75 for child molesters, rapists, and exhibitionists.

Molester comparison scale. This is a measure that examines "degree of pathology of child molesters" in a non-transparent manner (Nichols & Molinder, 2002). Items on this measure were found to be endorsed more by child molesters than by control participants. Nichols and Molinder (2002) found this scale to be elevated even when other validity scales showed that scores on the entire measure were suppressed. This measure has only been normed with adolescents 16 years and older and is therefore not available for adolescents under the age of 16 years. Internal consistency ranged from .76 - .81 for child molesters, rapists, and exhibitionists.

Sexual deviance scales. Sexual deviance scales include measures of child molestation, rape, exhibitionism, and voyeurism. The child molestation, rape, and exhibitionism scales are sub-divided into 4 measures (5 for rape scale) which examine four areas of the sexual abuse cycle: deviant arousal, pre-assault, assault, and aggravated assault. Low scores on the deviant arousal subscale suggest a participant who is denying fantasies and high scores suggest an openness of arousal. The pre-assault subscale examines grooming behavior. High scores on this subscale suggest the participant is taking responsibility for his behavior. The assault subscale examines the sexually offensive behavior in which the participant engaged (e.g., "I have

touched a child's privates in a sexual way"; Nichols & Molinder, 2002). The aggravated assault subscale explored the aggressiveness of the abusive behavior (e.g., "I have become so mad that I have physically hurt a person for not letting me have sex"; Nichols & Molinder, 2002).

Child Molester Scale. This is a 40 item face-valid measure of child molestation. It also has additional questions which examine the gender and relationship with the victim. Internal consistency ranged from .94 to .96 for child molesters and rapists.

Rape Scale. This is a 40 item face-valid measure of rape. In addition to the four subscales similar to the child molester and exhibitionism scale, the rape scale includes a measure of violent assault. This subscale examines rape sadism, which is when an offender feels more pleasure from hurting the victim than from the sexual act. Internal consistency of this scale was .87 for rapists.

Exhibitionism Scale. This scale measures 20 face-valid items related to exposing behaviors. The fourth subscale on this measure is advanced assault. The advanced assault subscale includes items such as "I have exposed my penis more times than I can remember." Internal consistency for this scale ranged from .86 to .91 for child molesters, rapists, and exhibitionists.

Voyeurism Scale. This is a 13 item measure of voyeuristic behavior. Unlike the first three sexual deviance scales, the voyeurism scale does not include subscales. It does assess preoccupation with peeping and grooming behaviors. This scale was found to have weaker psychometric properties with internal consistency ranging from .75-.82 for child molesters, rapists, and exhibitionists.

Additional paraphilias indices. Measures under this category include sexual harassment, netsex, obscene calls, pornography, transvestism, fetishism, other paraphilias,

bondage/discipline, sexual sadism, and masochism. Individual items that compose each of the measures are noted on the profile sheet to allow for further exploration of these paraphilias.

Sexual Harassment Index. The sexual harassment index is a 9 item measure of stalking and harassing behaviors. Included in this scale are items pertaining to frotteurism (e.g., "There have been times that I have pressed my penis against someone (stranger or acquaintance) or grabbed their breasts/genitals"; Nichols & Molinder, 2002). No psychometric properties are available for this index.

Netsex Index. The netsex index is an 8 item measure of online sex behavior. Items on this index include questions pertaining to seeking out children online to have sex with, sexual talk online with strangers, and trying to meet a child in person they met online for sex (e.g., "After chatting with a child (minor) on the internet, I have tried to meet them for sex"; Nichol & Molinder, 2002). No psychometric properties are available for this index.

Obscene Calls Index. This is a 5 item measure about sexual phone calls. Items on this measure including making obscene phone calls, making phone calls to frighten others, and masturbating while making sexual phone calls (e.g., "I have masturbated myself while making sexy or obscene talk on the phone or internet."; Nichols & Molinder, 2002). Internal consistency of this measure ranged from .78 - .83 for child molesters, rapists, and exhibitionists.

Pornography Index. The Pornography Index is a 9 item measure examining addiction to pornography as well as making and buying deviant pornography. Types of pornography included in this scale are rape, sadism, and child pornography (e.g., "I have spent time on the internet looking for pictures of nude children or rape scenes"; Nichols & Molinder, 2002). Internal consistency of these items is very low with ranges between .05 and .63. Nichols and Molinder (2002) noted that the internal consistency of this index may be low due to the heterogeneous nature of the questions included.

Transvestism Index. This index is composed of 7 items examining arousal to and wearing of female clothing. Three items explore arousal when wearing female clothes. Other items explore behaviors such as secretly or public dressing as a female. Internal consistency was .48 for child molesters.

Fetishism and other Paraphilias Index. This is a 7 item measure examining a wide variety of other paraphilias including urophilia (i.e., arousal to being urinated on), coprophilia (i.e., arousal to sexual activity with dead bodies), zoophilia (i.e., arousal to sexual activity with animals), and arousal to fire. Others items on this measure explore arousal to female underwear (e.g., "I have become sexually stimulated while feeling or smelling female's underwear"; Nichols & Molinder, 2002). Internal consistency ranged from .29 - .63 for child molesters, rapists, and exhibitionists. Again, Nichols and Molinder (2002) noted that the low internal consistency could be explained by the wide range of behaviors explored on this index.

Bondage/Discipline Index. The Bondage/Discipline Index is a 6 item measure examining consensual sexual activities that involves bondage activities such as being tied up. Three of these items pertain to fantasies and three items pertain to behaviors (e.g., "I have used leathers, whips, handcuffs, sharp things, etc., during sex"; Nichols & Molinder, 2002). Internal consistency of this index ranged from .56 - .65 for child molesters, rapists, and exhibitionists.

Sexual Sadism Index. This is a 5 item measure examining arousal and behavior pertaining to consensual sexual acts that involve arousal when hurting another person. Items on this measure include: "I have become highly aroused when my sex partner has suffered pain and humiliation during sex" (Nichols & Molinder, 2002). Internal consistency for this index ranged from .48 - .64 for child molesters, rapists, and exhibitionists.

Masochism Index. This is a 5 item measure examining the desire to be in pain or humiliated during sex. Items on this index include: "The more pain and humiliation done to me

during sex, the greater sexual arousal I have” (Nichols & Molinder, 2002). Internal consistency for this measure ranged from .38 - .62 for child molesters, rapists, and exhibitionists.

Underlying Emotional Disorder Measures. These measures are composed of scales concerning sexual interactions, deep seeded feelings, feelings of being a victim, and issues related to body image.

Socio-sexual inadequacies scale. The Socio-Sexual Inadequacies scale is a measure that indicates a marked anxiety when interacting with same age females. Scores range from 0-16. Items on this scale include: “I have never really felt good enough about myself around most women” (Nichols & Molinder, 2002). Scores of 6 or more indicate marked anxiety during interactions with girls their age. The internal consistency of this measure was good with alphas ranging from .80 - .84 for child molesters, rapists, and exhibitionists.

Emotional neediness scale. This measure indicates “deep feelings of the need for affection and feelings of loneliness with sexual desires” with scores ranging from 0-21 (Nichols & Molinder, 2002). Scores of 8 or more indicate that an individual is “emotionally needy” (Nichols & Molinder, 2002). Internal consistency of this scale ranged from .84 to .90 for child molesters, rapists, and exhibitionists.

Cognitive Distortion/Immaturity scale. This measure examines how much an individual believes they are the victim and blaming others and situations for their problems with scores ranging from 0-17. Scores of 6 or more indicate that an individual has thinking errors which result in them blaming others. Internal consistency of this scale ranged from .81- .86 for child molesters, rapists, and exhibitionists.

Body Image scale. The Body Image scale looks at degrees of criticalness towards self. Scores on this measure range from 0-11 with items including those such as feeling sexually unattractive, self-critical of looks, thinking he’s ugly, ashamed of looks, teased about looks, so

ugly he hates himself, height is a concern, bad skin, too fat, and penis size is a concern. Internal consistency of this measure ranged from .57 - .64 for child molesters, rapists, and exhibitionists.

Sexual Functioning Index. This is a measure with scores ranging from 0-11 with higher scores indicating more problems functioning sexually. Items on this scale include problems related to a sexual birth defect, premature ejaculation, painful erections, depressed mood, sad and blue, no libido, drugs prevent erection, can't get an erection, and no erection due to an illness. Internal consistency ranged from .31 - .64 for child molesters, rapists, and exhibitionists.

Offense Rationale Measures. Offense rationale measures include scales giving excuses for the offending behavior including *Denial*, *Justifications*, *Scheming*, and *Superoptimism*.

Denial Scale. The Denial scale is a 25 item measure of rationalizations for their offending behavior. Scores of 3 or more indicate that the individual acknowledges some behavior occurred, but they have a reason for said behavior. Nichols and Molinder (2002) noted that on average, offender endorse 8 items. Items on this measure include: "Sexual things just seemed to happen between me," "the other person who accused me," and "I did not plan it" (Nichols & Molinder, 2002). Internal consistency for this measure ranged from .78 to .83 for child molesters, rapists, and exhibitionists.

Justifications scale. The Justifications scale is a 24 item measure which assesses the amount of responsibility a person places on people and things outside of his control. Nichols and Molinder (2002) stated that on average, four items are endorsed. Scores of 3 or more indicate an individual blames people and things outside of his control. Items on this measure include: "My sexual offense happened because I tried to help the person with their sexual growth and development" (Nichols & Molinder, 2002). Internal consistency for this scale ranged from .77 to .81 for child molesters, rapists, and exhibitionists.

Scheming scale. The Scheming scale is an 8 item measure assessing an offender's degree of acknowledgment that he planned the offense to ensure he did not get caught. Scores of 6 or more acknowledge that the behavior was planned. Scores of less than 6 indicate that an individual is unaware of their grooming behaviors. Items on this measure include: "For a while I was pretty clever at not getting caught doing my offense" (Nichols & Molinder, 2002). Internal consistency of this scale ranged from .75 - .79 for child molesters, rapists, and exhibitionists.

Superoptimism scale. This is an 8 item measure examining the excitement the offender felt before the offense. Nichols and Molinder (2002) stated that offenders tend to feel more confident in their ability to not get caught closer to the offense. Scores of 6 or more indicate excitement before the offense. Items on this measure include: "I got a rush of excitement when I knew I was about to do my offense" (Nichols & Molinder, 2002). Internal consistency of this measure ranged from .76 - .84 for child molesters, rapists, and exhibitionists.

Gender/ Sexuality Development Scales. These measures are those concerning gender identity, sexual orientation, sexual knowledge, and sexual ethics.

Gender identity scale. The Gender Identity scale indicates a desire to be female with scores ranging from 0-7. Items on this scale include items pertaining to feelings like a female as a child, currently feeling/thinking like a female, feeling like a female in a male's body, and wishes to have female genitals and being a female. No psychometric properties are available for this scale.

Sexual orientation scale. The Sexual Orientation scale includes items such as afraid he may be gay, states he is heterosexual, has had sex with males and females, and states he is homosexual. It does not include a summation of items and there are no psychometric properties for this scale.

Reliability Procedures

All data was collected and coded by the primary researcher (see Appendix A for data coding form). A trained graduate student researcher re-coded 20% of the data from the psychological evaluations ($n = 15$) in order to assess for interrater agreement. Kappa statistics were analyzed to assess for interrater agreement on these categorical variables. Kappa statistics ranged from .607 to 1.00 (see Table 3 for all Kappa Statistics). Discrepancies between the primary researcher and the graduate student coder were discussed and resolved.

Results

Purpose 1- Child vs. Peer Offenders: Offender, Offense, and Victim Variables

The final sample included 53 child offenders (Victim age: $M = 6.30$, $SD = 2.11$, Median = 6.00) and 21 peer offenders (Victim age: $M = 12.35$, $SD = 9.59$, Median = 10.00)³. Table 4 presents the categorical demographic variables as well as categorical victim, offender, and offense characteristic variables. Child and peer offenders differed significantly on whether they had prior status or non-violent charges, $\chi^2(1, N = 74) = 4.353$, $p = .037$, $\phi = .243$ (small to medium effect size⁴). Twenty-nine percent of peer offenders ($n = 6$) reported prior status or nonviolent charges whereas only seven percent of child offenders ($n = 5$) reported similar charges. Child and peer offenders did not differ significantly on any other categorical demographic or victim, offender, or offense characteristics.

A series of MANOVAs were used to compare child and peer offenders on continuous variables including victim, offender, and offense characteristics. Given the unequal sample sizes between groups, a Sum of Squares Type IV was used on each of these MANOVAs (Shaw &

³ There was one peer offender with an 86-year old victim. With this outlier removed, peer offenders' victim age $M = 10.90$, median = 10.50.

⁴ Effect size approximations are based on Nandy (2012) which found that Phi and Cramer's V effect sizes were small = 0.10, medium = 0.30, and large = 0.50.

Mitchell-Olds, 1993). Violations of Box's M as well as Levene's Test were also examined for each MANOVA. Univariate statistics were explored for MANOVAs with significant main effects.

Table 5 presents the continuous demographic variables as well as continuous victim, offender, and offense characteristics. Despite adjustments, the Box's M was significant, $p = .000$, as such the results should be interpreted cautiously. Also, the Levene's Test was significant for the victim's age variable. The first MANOVA examined victim and offense characteristics and an overall difference was found, $F(3, 70) = 7.209, p < .001$, Wilks' $\lambda = .764$, partial $\eta^2 = .236$ (large effect size). Upon examining univariate results, child and peer offenders differed in the mean age of their victims, $F(1, 72) = 19.536, p < .001$, partial $\eta^2 = .213$ (large effect size), with victims of peer offenders ($M = 12.36, SD = 9.59$) being older than the victims of child offenders ($M = 6.24, SD = 2.11$). The other significant univariate finding was that peer offenders ($M = 3.86, SD = 1.24$) scored higher on a measure of Offense Severity Index compared to child offenders ($M = 3.17, SD = 1.25$), $F(1, 72) = 4.566, p = .036$, partial $\eta^2 = .060$ (medium effect size). High scores on the Offense Severity Index denote more severe offenses or offenses in which excessive force was used.

Purpose 2- Child vs. Peer Offenders: Psychosexual Variables

MANOVAs were also used to examine variables grouped by sections of the MSI including Validity Scales, Information and Referral Issues, Sexual Deviance Scales, Additional Paraphilias, Emotional Disorder Measures, and Offense Rationale Measures. We initially proposed to control prior sex offender treatment; however we were unable to run these analyses with a covariate due to missing data and limited sample size. Furthermore, we were unable to access information about length of time in treatment, therefore that was not controlled for either.

Child offenders and peer offenders differed significantly in the overall measure of the Sexual Deviances measures, $F(4, 66) = 5.962, p < .001$, Wilks' $\lambda = .735$, partial $\eta^2 = .265$ (large effect size). Upon examining the univariate analyses (See Table 6), none of the Sexual Deviance measures were found to be significant; however two of the measures, the Child Molestation

Scale and the Exhibitionism Scale, were trending towards significance. Child Offenders ($M = 19.00, SD = 10.57$) scored higher on the Child Molestation Scale than peer offenders ($M = 13.52, SD = 10.63$), $F(1, 69) = 3.958, p = .051$, partial $\eta^2 = .054$ (small to medium effect size). Additionally, child offenders ($M = 6.94, SD = 5.02$) scored higher than peer offenders ($M = 4.57, SD = 5.16$) on the Exhibitionism Scale, $F(1, 69) = 3.234, p = .076$, partial $\eta^2 = .045$ (small to medium effect size).

Two MANOVAs were analyzed to compare child and peer offenders on the Emotional Disorder variables of the MSI. See Tables 7 and 8 for univariate findings for Emotional Disorder variables. The first MANOVA examining socio-sexual inadequacies, emotional neediness, and cognitive distortions was not significant, $F(3, 70) = .743, p = .530$, Wilks' $\lambda = .969$, partial $\eta^2 = .031$ (small effect size). The second MANOVA was trending towards significance for child and peer offenders on two other Emotional Disorder measures, Sexual Functioning and Body Image, $F(2, 61) = 2.802, p = .069$, Wilks' $\lambda = .916$, partial $\eta^2 = .084$ (medium effect size). Univariate analyses demonstrated that peer offenders ($M = 3.00, SD = 5.16$) reported more issues with sexual functioning than child offenders ($M = 1.26, SD = 1.51$), $F(1, 62) = 4.839, p = .032$, partial $\eta^2 = .072$ (medium effect size). The sexual functioning index

examined issues of erectile dysfunction for a variety of reasons (e.g., surgery, depression).

Appendix B presents tables for which there were no significant overall differences.

Chi-square analyses were conducted to compare child and peer offenders on trauma variables. Child and peer offenders did not differ significantly in rates of physical, sexual, or emotional abuse nor did they differ in rates of neglect or witnessing domestic violence.

Although not significantly different in rate, at least 50% of child and peer offenders reported experiencing physical and sexual abuse. Child offenders ($M = 7.07$, $SD = 3.57$) and peer offenders ($M = 6.11$, $SD = 3.30$) did not differ in age of first sexual abuse, $F(1, 34) = .508$, $p = .481$, partial $\eta^2 = .015$ with child offenders being victimized at a slightly older age than peer offenders. Percentages and chi-square results are reported in Table 9.

Follow up analyses examined the sexual abuse history of participants, in particular the gender and relationship of the person who sexually victimized the male juvenile sex offender. Child and peer offenders who had been sexually abused did not differ in the gender of the person who sexually abused them. Child and peer offenders did differ in their relationship with the perpetrator in that the majority of child offenders (55.2%) were abused by relatives whereas the majority of peer offenders (55.6%) were abused by both relatives and non-relatives, Likelihood ratio⁵ ($2, N = 38$) = 9.367, $p = .009$, Cramer's $V = .504$ (large effect size).

Binary Logistic Regression

A binary logistic regression was conducted to assess whether group membership (i.e., child and peer offender) could be predicted by significant variables from univariate analyses. Specifically the predictor variables were prior status offenses, sexual functioning index, offense

⁵ Likelihood ratio test was used because the sample size violated assumptions of chi-square test and the number of groups violated the fisher exact test. (McHugh, 2013).

severity index, and child molestation scale. As there were no apriori hypotheses about these variables, the predictor variables were entered into the model simultaneously.

The full model was statistically significant, $\chi^2 (4, N = 72) = 14.129, p = .007$. Twentyfive percent (Nagelkerke R^2) of the variance in group member was explained by the model. The model was able to correctly classify 77.8% of cases with 98% of child offenders identified correctly and 28.6% of peer offenders identified correctly. One variable made a statistically significant contribution to the model and one variable was trending toward a significant contribution (see Table 10). Odds ratios suggest that high scores on the child molestation scale increased the chances of being correctly classified as a child offender by .942. Also, the trending findings suggests that having a prior non-status charges makes an offender in this sample 4 times as likely to correctly classified as a peer offender.

Purpose 3- Child vs. Peer vs. Mixed Offenders

Demographic and univariate analyses. The final sample included 43 child offenders (Victim age: $M = 5.78, SD = 1.96, \text{Median} = 6.00$), 17 peer offenders (Victim age: $M = 13.00, SD = 10.61, \text{Median} = 10.00$), and 14 mixed offenders (Victim age: $M = 8.62, SD = 1.52, \text{Median} = 9.00$)⁶. Table 11 presents the categorical demographic variables as well as categorical victim, offender, and offense characteristic variables. Child, peer, and mixed offenders differed significantly in victim gender and relationship to the victim. Child offenders (60.5%) and peer offenders (82.4%) primarily offended against female victims, whereas mixed offenders (57.1%) offended against both male and female victims, Likelihood ratio $(4, N = 74) = 22.699, p < .001$, Cramer's $V = .382$ (medium effect size). Furthermore, child offenders (67.4%) offended against relatives, whereas peer offenders (52.9%) offended against non-relatives, and mixed offenders

⁶ There was one peer offender with an 86-year old victim, without this outlier the peer offenders' victim age $M = 10.50, \text{Median} = 10.00$.

(64.3%) offended against relatives and non-relatives, Likelihood ratio (4, $N = 74$) = 30.668, $p < .001$, Cramer's $V = .499$ (large effect size). Child, peer, and mixed offenders also differ significantly in rates of prior sex offender treatment with 78% of child offenders having no prior treatment, 50% of peer offenders not having prior sex offender treatment and 67% of mixed offenders engaging in prior sex offender treatment χ^2 (2, $N = 58$) = 8.579, $p = .014$, Cramer's $V = .385$ (medium effect size).

In the same manner as explained above, a series of MANOVAs were used to compare child, peer, and mixed offenders on continuous variables including victim, offender, and offense characteristics. MANOVAs were also used to examine variables grouped by sections of the MSI including Validity Scales, Information and Referral Issues, Sexual Deviance Scales, Additional Paraphilias, Emotional Disorder Measures, and Offense Rationale Measures. Given the unequal sample sizes between groups, a Sum of Squares Type IV was used on each of these MANOVAs (Shaw & Mitchell-Olds, 1993). Violations of Box's M as well as Levene's Test were also examined for each MANOVA. Box's M was violated for most analyses, and therefore results should be interpreted cautiously. Univariate statistics were examined when the MANOVA's main effect was significant. Post-hoc analyses were explored for all significant univariate statistics.

Child, peer, and mixed offenders differed significantly on continuous victim and offense characteristics, $F(6, 138) = 6.389$, $p < .001$, Wilks' $\lambda = .612$, partial $\eta^2 = .217$ (large effect size). Table 12 presents univariate analyses finding that child, peer, and mixed offenders significantly differed on their age at first sexual offense, $F(2, 71) = 5.608$, $p = .005$, partial $\eta^2 = .136$ (large effect size). Post hoc analyses (with Bonferroni adjustments) mixed offenders ($M = 11.57$, $SD =$

2.24) began offending at a significantly younger age compared to child offenders ($M = 13.77$, $SD = 2.19$) and the finding was trending ($p = .060$) for mixed offenders offending at a younger age than peer offenders ($M = 13.41$, $SD = 1.91$). Child, peer, and mixed offenders also differed significantly in the mean age of their victims, $F(2, 71) = 11.426$, $p < .001$, partial $\eta^2 = .243$. Post hoc analyses (with Bonferroni adjustments) found that the victims of child offenders ($M = 5.78$, $SD = 1.96$) were significantly younger than the victims of peer offenders ($M = 13.00$, $SD = 10.61$) whereas child offenders and mixed offenders ($M = 8.62$, $SD = 1.52$) did not differ in age of victims. There was a trending finding ($p = .075$) that the victims of peer offenders were older than the victims of mixed offenders.

There was an overall difference between child, peer, and mixed offenders on Sexual Deviance scales, $F(8, 180) = 2.847$, $p = .006$, Wilks' $\lambda = .724$, partial $\eta^2 = .149$ (large effect size). Table 13 presents univariate analyses finding that child, peer, and mixed offenders differed significantly in scores on the Child Molestation Scale, $F(2, 68) = 4.116$, $p = .021$, partial $\eta^2 = .108$ (medium to large effect size). Post hoc analyses (with Bonferroni adjustments) concluded that child offenders ($M = 19.55$, $SD = 10.46$) scored higher on the Child Molestation Scale than peer offenders ($M = 11.12$, $SD = 9.56$) or mixed offenders ($M = 18.79$, $SD = 10.96$). Peer offenders and mixed offenders did not significantly differ from each other. Appendix B presents univariate findings for MSI psychosexual variables for which there were no significant overall differences.

Chi-square analyses were conducted to compare child, peer, and mixed offenders on trauma variables. Child, peer, and mixed offenders did not differ significantly in rates of physical, sexual, or emotional abuse nor did they differ in rates of neglect or witnessing domestic violence. Although not significantly different in rate, 79% of mixed offenders reported being

sexually abused compared to 55% of child offenders and 44% of peer offenders. Follow up analyses examined the gender and relationship of the perpetrators of sexual abuse and found no differences between groups. There was also no difference between groups on age of sexual victimization with child offenders ($M = 6.80$, $SD = 3.71$) and mixed offenders ($M = 6.70$, $SD = 3.68$) being slightly younger than peer offenders ($M = 7.17$, $SD = 2.86$). Percentages and chisquare results are reported in Table 14.

Discriminant Function Analysis

A discriminant function analysis was used to examine whether group membership (i.e., child, peer, or mixed offenders) could be predicted from the significant continuous variables as examined above. A discriminant function analysis was used instead of logistic regression because the group variable is not dichotomous. These analyses derived two significant functions. The combination of discriminant functions was a significant predictor of group membership, $\chi^2(6) = 35.562$, $p < .001$. The second function alone was also a significant predictor of group membership, $\chi^2(2) = 9.362$, $p = .009$. Function 1 accounted for 76% of the variance whereas Function 2 accounted for 24% of the variance. Using a cutoff of .40, Function 1 was comprised of Mean age of the victims and the Child Molestation Scale whereas Function 2 is comprised of age at first offense and the Child Molestation Scale (see Table 15). Function 1 separated child offenders (group centroid = $-.554$) from mixed offenders (group centroid = $.469$) and peer offenders (group centroid = $.987$). Function 2 separated mixed offenders (group centroid = $.720$) from child offenders (group centroid = $.080$) and peer offenders (group centroid = $.395$). Group centroids are reported in Table 16. Overall these analyses was fairly good at correctly classifying groups (70%), more specifically these analyses were good at classifying child

offenders (93%), but were poor at classifying peer offenders (35%) and mixed offenders (43%; see Table 17).

Discussion Child Offenders vs. Peer Offenders

Our study found that child offenders and peer offenders differed significantly on a few victim characteristics including severity of their offense, and having a prior status/non-violent charge. Child offenders and peer offenders also differed significantly on the psychosexual variable of Sexual Functioning with findings trending towards significance for the Child Molestation Scale and the Exhibitionism scale. Child offenders and peer offenders did not differ in rates of trauma experiences including sexual, physical, or emotional abuse as well as neglect and witnessing domestic violence. Child offenders and peer offenders who had been sexually abused did differ in their relationship with the perpetrator.

The above noted significant variables were analyzed to determine if they could predict group membership (child offender or peer offender) and found that the Child Molester Scale was significantly able to predict group membership and prior status/non-violent charges was trending toward significance in predicting group membership. These variables were able to correctly classify 77.8% of cases including 98% of child offenders and only 28.6% of peer offenders. This suggests that the child offenders in this sample were more homogeneous whereas the peer offenders in this sample were more heterogeneous and difficult to correctly classify.

Of the victim, offender, and offense characteristics, peer offenders had more severe offenses or used more force, and had more status/non-violent charges. These findings are consistent with research that has found that peer offenders tend to be more antisocial in general than child offenders (Keelan & Fremouw, 2013).

In regard to psychosexual variables, the only significant finding was that peer offenders reported more sexual, erectile dysfunction compared to child offenders. To date, no research has

examined sexual functioning with juvenile sex offenders. Of the findings that were trending towards significance, child offenders scored higher on both the Child Molestation scale and the Exhibitionism Scale compared to peer offenders. This finding would suggest construct validity with the MSI-II, as it seems to be capturing differences between the groups based on age of the victim. Overall, it is difficult to draw conclusions about differences in psychosexual variables as little research has examined these variables.

In this study, child offenders and peer offenders did not differ in rates of traumatic experiences including sexual, physical, and emotional abuse as well as neglect and witnessing domestic violence. Further analyses focused on comparing child offenders and peer offenders who reported experiencing sexual abuse. Previous research has found that rates of sexual abuse in juvenile sex offenders ranges from 10% to 90% (Burton et al., 2011). Child offenders and peer offenders did not differ in age of first sexual victimization with means ranging from 6.11 - 7.07 years. These ages are consistent with Grabell and Knight's (2009) research findings that the age range of 3-7 years appears to be a sensitive period in which victims are more likely to become victimizers. We also found that child offenders and peer offenders did not differ in the gender of the perpetrator which is inconsistent with Worley (1995a) who found that peer offenders were more often offended by female perpetrators compared to child offenders. It is possible that small sample sizes in both Worley's study ($n = 7$) and the current investigation affected the findings.

Further research with larger sample sizes should continue to examine these findings.

This study did find that of child offenders and peer offenders who reported sexual abuse, child offenders were more likely to have been offended by a relative whereas peer offenders were more likely to have been offended by both relatives and non-relatives. This finding is consistent with previous research, which has found that juvenile sex offenders who have been

sexually abused offend in a manner consistent with their own abuse history (Veneziano et al., 2000). While not significantly different, 64% of child offenders offended against relatives whereas 52% of peer offenders offended against non-relatives.

Two of our hypotheses were supported. That is, peer offenders did have significantly more severe offenses compared to child offenders on the Offense Severity Index. Also, child offenders were sexually abused between the ages of 3 and 7 years old. Our other hypotheses were not supported including: differences in victim gender, relationship to the offender, age at first offense, paraphilic interests, sexual knowledge, and sexual abuse history.

Child Offenders vs. Peer Offenders vs. Mixed Offenders

Child offenders, peer offenders, and mixed offenders differed significantly on victim, offender, and offense characteristics including victim gender, victim relationship to the offender, prior sex offender treatment, and age at first sexual offense. The three groups also differed significantly in the Child Molestation Scale on the MSI-II. No other psychosexual variables were significantly different and groups did not differ on rates of traumatic experiences. Significant variables were able to predict group membership (i.e., child, peer, or mixed offender) and correctly classified 70% of the cases by correctly classifying 93% of child offenders, 35% of peer offenders, and 43% of mixed offenders. Similar to the child offender and peer offender comparison above, the peer offenders and mixed offenders in this sample appear to be more heterogeneous compared to child offenders, making it more difficult to correctly classify cases based on the significant variables found in this study.

Of the victim, offender, and offense characteristics, findings were generally consistent with previous research. Child and peer offenders were more likely to offend against female victims whereas mixed offenders offended against both male and female victims. These findings are consistent with research by Skubic-Kemper and Kistner (2007), where mixed offenders

offended against both male and female victims. In regard to the victim's relationship to the offender, child offenders more often offended against relatives, peer offenders offended against non-relatives, and mixed offenders offended against both relative and non-relative. Overall, mixed offenders were much more indiscriminate in their offending patterns compared to child offenders and peer offenders. Most previous research did not examine indiscriminate nature of mixed offenders, rather they examined variables such as any male victim or any unrelated victims with varied findings with some mixed offenders looking more like child offenders (i.e., male, related victims; Leroux et al., 2014) and other research finding mixed offenders looked more like peer offenders (i.e., female, unrelated victims; Fanniff & Kolko, 2012). In regard to age at first offense, mixed offenders began offending at a significantly younger age compared to child offenders. The finding that mixed offenders began offending at a younger age than peer offenders was trending toward significance. Richardson and colleagues (1997) also found that mixed offenders began offending at a younger age. Finally, child offenders were significantly less likely to have ever participated in prior sex offender treatment, whereas half of peer offenders had participated in prior sex offender treatment, and most of the mixed offenders had previously participated in sex offender treatment. In this particular sample, prior sex offender treatment meant that the offender failed multiple other sex offender treatment facilities and was eventually sent to either Chestnut Ridge Center or the Dr. Harriet B. Jones Treatment Center. This is consistent with research by Parks and Bard (2006) who found that mixed offenders were less likely to complete treatment and more likely to age out of the system compared to child offenders and peer offenders.

In regard to psychosexual variables, child offenders scored higher on the Child Molestation Scale compared to peer offenders and mixed offenders. No other psychosexual variables differ significantly between comparison groups. Child, peer, and mixed offenders also

did not differ significantly in rates of traumatic experiences; however 79% of mixed offenders reported being sexually abused, whereas only 55% of child offenders and 44% of peer offenders reported being sexually abused. These percentages are similar to previous research comparing child, peer, and mixed offenders on sexual abuse variables (Richardson et al., 2009; Leroux et al., 2014). Consistent with previous research by Grabell and Knight (2009), offenders reported first being sexually abused between the ages of 6 and 7 years old.

In regard to comparisons between child, peer, and mixed offenders, many of our hypotheses were supported. Mixed offenders offended both male and female victims more so than the other two groups. Also, mixed offenders were more likely to offend against both relatives and non-relatives. Finally, we hypothesized that mixed offenders would differ from child and peer offenders on psychosexual variables (although we did not specify directionality). The only psychosexual variable that significantly differed by groups was the Child Molestation Scale, so this hypothesis was partially supported.

Limitations

Limitations of this study included sample size, reliance on self-report data, a single measure of psychosexual development, and comparison groups based on number of victims rather than incidences of offending. This study examined an exhaustive sample of offenders at two facilities over the period of six years when the MSI-II was used, resulting in a final sample size of 74 participants. Similar to limitations throughout much of the literature, this small sample size may have limited our ability to detect meaningful differences. In one recent study with an adequate sample size, Leroux and colleagues (2014) need 22 years worth of data to collect 159 cases. Because of the limited sample size, we were unable to compare mixed

offenders with child offenders and peer offenders who also reported having multiple victims. For our analyses we combined child offenders with one victim and multiple victims into one group and did the same with peer offenders. This makes it difficult to know whether the significant differences between mixed offenders and the other two groups are because these offenders had child and peer victims or these groups differed because the mixed offenders inherently had multiple victims. We had proposed to control for prior sex offender treatment; however due to sample size and missing data we were unable to covary prior sex offender treatment.

Another limitation of this study was the use of archival, self-report data. Existing data was collected from offender's charts and included psychological evaluations from a variety of evaluators. Relying on these psychological evaluations led to a variety of missing data as different evaluators included varying amounts of details in their reports. Most of the information provided in the psychological evaluations and all of the information provided on the MSI-II was self-report data. Previous research has found that participants tended to under-report socially undesirable behaviors on self-report measures when compared with polygraph testing (Schenk, Cooper-Lehki, Keelan, & Fremouw, 2014). This underreporting may have hindered our ability to detect true differences between the comparison groups. Additionally, this study only examined one measure of psychosexual development, which has little research support, particularly with juvenile sex offenders.

Lastly, this study divided comparison groups based solely on the age of their victims and when attempting to compare offenders with multiple victims of the same age-group we only examined number of separate victims. These comparisons do not examine incidences of offending. For example, an offender who offended one victim one time was grouped with other offenders who offended one victim frequently over a period of time. Research has yet to

examine whether these two offenders are similar in variables we examined at in this study.

Furthermore, dividing comparison groups by victim age fails to consider the developmental age of victims. For example, one participant in this study offended his adult sister who was blind and intellectually disabled. This participant was considered a peer offender based on the criteria established for this study; however as a peer offender he may look very different from other peer offenders. This may account for the heterogeneity of the sample. Finally, for this study we used information available from the first psychological evaluation on file. While most participants only had one psychological evaluation, for those with multiple evaluations it is possible that using the newest evaluation would have provided a more accurate picture of their criminal and psychosexual history.

Theoretical Implications

The findings of this study support the Ward and Siegart Model of sexual offending which proposes five pathways to offending including “(1) an intimacy-and-social-skills-deficit pathway; (2) a deviant-sexual-script pathway (in which sexual behavior is erroneously equated with the expression of interpersonal closeness); (3) an emotional-dysregulation pathway; (4) an antisocial-cognitions pathway; and (5) a multiple-dysfunctional-mechanisms pathway. (O'Reilly & Carr, 2006, p. 191).” When considering our findings that mixed offenders tended to be more indiscriminate with victim age, gender, and their relationship as well as 75% had been sexually abused, they seem to fit into the multiple-dysfunctional-mechanisms pathway in that it is a variety of emotional and behavioral dysregulation leading to their sexual behaviors. Further, the child offenders scored higher on the child molestation scale suggesting this group fits closely into the deviant-sexual-script pathway in which they may confuse sexual behavior and interpersonal closeness. The peer offenders were more likely to have a prior status or non-violent

charge suggesting this group may fit more closely into the antisocial-cognitions pathways. This would suggest that for many peer offenders sexually offending is one expression of a variety of different antisocial behaviors.

Social learning theory (Bandura, 1973) proposed that children model their behavior from behavior they witness from a variety of sources in their lives. There are many ways in which sexual and antisocial behavior is modeled for children including trauma experiences, witnessing violence in their homes and communities, and early exposure to sex in the form of sexually explicit material and pornography. Of participants in this study, 55% reported a history of sexually abuse. Research has found that of these offenders with a sexual abuse history, many offend others in patterns similar to their own abuse (Veneziano et al., 2000). It is unclear what specific modeling may have occurred for the 45% of participants with no sexual abuse history but it is likely they were exposed to sexually material or witnessing violence in their communities. Future research exploring the psychosexual development of juvenile with no sexual abuse history is important.

Clinical Implications

New research out of Sweden suggests a genetic influence in sexual offending (Langstrom, Babchishin, Fazel, Lichtenstein, & Frisell, 2015). Using a large, longitudinal sample ($N = 21,566$), of the variance in sexual offending 40% was explained by genetic, 58% was explained by non-shared environmental factors, and 2% was explained by shared environmental factors. This study suggests the need to consider family history of sexual aggression. In the current study, 4% of the sample had a reported family history of sexually

aggression, usually fathers incarcerated for sexual offenses.⁷ Our findings in conjunction with Langstrom and colleagues findings suggest the importance of inquiring about family history of sexual aggression during assessments of juvenile and adult sex offenders. These findings also suggest the possibility of early intervention to bolster coping and emotion regulation skills.

Also in terms of early interventions, research by Grabell and Knight (2009) suggest that individuals who were sexually abused during the sensitive period between the ages of 3 and 7 years were more likely to later engage in sexually aggressive behavior. The current study supported this finding in that participants who reported being a sexual abuse history were first abused, on average, at the age of 6 years old.

Differences between child, peer, and mixed offenders suggest the need for more idiographic treatments focusing on findings in the research as well as individual strengths and weaknesses. This study found that mixed offenders began offending at an earlier age and were more likely to fail treatment suggesting a need for more structured and intensive treatment with offenders were both child and peer victims. Peer offenders were more likely to have a status or non-violent charge suggesting a need for treatments focusing on strategies that have been found to be effective with individuals with conduct disorder. Finally, child offenders were the most homogenous group suggesting that treatment continues to focus on emotion regulation skills as well as focusing on increasing healthy sexuality with age-appropriate peers.

Future Directions

Despite the limited sample size, this study demonstrated the importance of examining mixed offenders separately from child offenders and peer offenders. This study also replicated

⁷ These were participants who mentioned a family member with sexual behavior problems during their psychological evaluation; however many of the psychological evaluations made no mentioned confirming or denying family history of sexual aggression.

many of the findings in previous literature, particularly when comparing child offenders, peer offenders, and mixed offenders. Mixed offenders were found to have been more indiscriminate in who they offended and were more likely to have failed at previous treatment facilities. These findings suggest that mixed offenders treatment needs may differ from offenders with victims of one age range. Future research needs to compare these mixed offenders with child offenders and peer offenders with multiple victims.

Further, this study expanded the literature to examine a larger variety of psychosexual variables in somewhat more depth. Future exploration of psychosexual variables is important as it could help to differentiate areas of assessment and treatment for juvenile sex offenders. Additionally, future research could examine these psychosexual variables with other typologies of offenders such as sex-only or sex-plus offenders as studied by Pullman and Seto (2012) or comparing incest and non-incest offenders. One specific psychosexual variable for future research to explore is pornography exposure such as age at first exposure, type of exposure, frequency of exposure, and its relation to sexual offending behavior. This study found that the MSI-II was not very useful in comparing child, peer, and mixed offenders. Future research could examine results on the MSI-II with corroborating evidence such as polygraph testing, penile plethysmograph testing, or viewing time measures.

Consistent with previous research, a majority of this sample reported experiencing trauma. While the comparison groups did not differ significantly, we may not have had power to detect significant difference given that 79% of mixed offenders, 55% of child offenders, and 44% of peer offenders reported being sexually abused. This study also supported the theory that juvenile sex offenders who have been sexually abused, offend in patterns similar to their own offense history. Additionally, this study found that offenders were sexually abused on average between the ages of 6 and 7 years old. Grabell & Knight (2009) described this as a sensitive

period of time that when abuse occurs the victims are more likely to eventually become offenders. They theorized the reason for this sensitive period is that this age range is when impulse control and emotion regulation is developed and sexual abuse may disrupt that development. One avenue for future research is to compare neuropsychological functioning and brain imaging of juvenile sex offenders with and without an abuse history.

References

- Aebi, M., Vogt, G., Plattner, B., Steinhausen, H., & Bessler, C. (2012). Offender types and criminality dimensions in male juveniles convicted of sexual offenses. *Sexual Abuse: Journal of Research and Treatment*, 24(3), 265-288. doi: 10.1177/1079063211420449
- Awad, G.A., & Saunders, E.B. (1991). Male adolescent sexual assaulters: Clinical observations. *Journal of Interpersonal Violence*, 6(4), 446-460. doi: 10.1177/088626091006004004
- Aylwin, A.S., Clelland, S.R., Kirkby, L., Reddon, J.R., Studer, L.H., & Jonhston, J. (2000). Sexual offense severity and victim gender preference. *International Journal of Law and Psychiatry*, 23(2), 113-124. doi: 0160-2527/00
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Barbaree, H.E., & Langton, C.M. (2006). The effects of child sexual abuse and family environment. In H. E. Barbaree & W. L. Marshall (Eds.), *The Juvenile Sex Offender* (pp. 58-76). New York, NY: The Guilford Press.
- Barbaree, H.E., & Marshall, W.L. (2006). An introduction to the juvenile sex offender: Terms, concepts, and definitions. In H. E. Barbaree & W. L. Marshall (Eds.), *The Juvenile Sex Offender* (pp. 1-18). New York, NY: The Guilford Press.
- Burton, D.L. (2003). Male adolescents: Sexual victimization and subsequent sexual abuse. *Child and Adolescent Social Work Journal* 20, 277-296. doi: 10.1023/A:1024556909087

Carpenter, D. R., Peed, S. F., & Eastman, B. (1995). Personality characteristics of adolescent sexual offenders: A pilot study. *Sexual Abuse: Journal of Research and Treatment*, 7(3), 195-203. doi: 10.1007/BF02258504

Chestnut Ridge Center. (no date). *Child and Adolescent Services*. Retrieved from:

<http://wvuhealthcare.com/wvuh/Hospitals-Clinics/Chestnut-Ridge-Center/Child-Adolescent-Services>

Craig, L. A., Browne, K. D., Beech, A., & Stringer, I. (2006). Psychosexual characteristics of sexual offenders and the relationship to sexual reconviction. *Psychology, Crime, & Law*, 12(3), 231-243. doi:10.1080/10683160500151084

DeLisi, M., Kosloski, A.E., Vaughn, M.G., Caudill, J.W., & Trulson, C.R. (2014). Does childhood sexual abuse victimization translate into juvenile sexual offending? New evidence. *Violence and Victims*, 29, 620-635. doi: 10.1891/0886-6708

Dr. Harriet B. Jones Treatment Center (n.d.). Retrieved from

<http://www.wvdjs.state.wv.us/JuvenileCenters/DrHarrietBJonesTreatmentCenter/AboutHarrietBJonesTreatmentCenter/tabid/217/Default.aspx>

Driemeyer, W., Spehr, A., Yoon, D., Richter-Appelt, H., & Briken, P. (2013). Comparing sexuality, aggressiveness, and antisocial behavior of alleged juvenile sexual and violent offenders. *Journal of Forensic Sciences*, 58(3), 711-718. doi: 0.1111/1556-4029.12086

Fanniff, A. M., & Kolko, D. J. (2012). Victim age-based subtypes of juveniles adjudicated for sexual offenses: Comparisons across domains in an outpatient sample. *Sexual Abuse: Journal of Research and Treatment*, 24(3), 224-264. doi: 10.1177/1079063211416516

Ford, M. E., & Linney, J. A. (1995). Comparative analysis of juvenile sexual offenders, violent nonsexual offenders, and status offenders. *Journal of Interpersonal Violence*, 10, 56-70. doi: 10.1177/088626095010001004

- Grabell, A.S., & Knight, R.A. (2009). Examining childhood abuse patterns and sensitive periods in juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 21(2), 208-222. doi: 10.1177/1079063209333133
- Gray, A., Busconi, A., Houchens, P., & Pithers, W.D. (1997). Children with sexual behavior problems and their caregivers: Demographics, functioning, and clinical patterns. *Sexual Abuse: A Journal of Research and Treatment*, 9(4), 267-290. doi: 10.1007/BF02674853
- Gunby, C., & Woodhams, J. (2010). Sexually deviant juveniles: Comparisons between the offender and offence characteristics of 'child abusers' and 'peer abusers'. *Psychology, Crime & Law*, 16(1-2), 47-64. doi: 10.1080/10683160802621966
- Hart-Kerkhoffs, L., Doreleijers, T. A. H., Jansen, L. M. C., van Wijk, A. P. H., & Bullens, R. A. R. (2009). Offense related characteristics and psychosexual development of juvenile sex offenders. *Child and Adolescent Psychiatry and Mental Health*, 3. doi: 10.1186/1753-2000-3-19
- Hendriks, J., & Bijleveld, C. C. J. H. (2004). Juvenile sexual delinquents: Contrasting child abusers with peer abusers. *Criminal Behaviour and Mental Health*, 14(4), 238-250. doi: 10.1002/cbm.591
- Hsu, L. G., & Starzynski, J. (1990). Adolescent rapists and adolescent child sexual assaulters. *International Journal of Offender Therapy and Comparative Criminology*, 34(1), 23-30. doi: 10.1177/0306624X9003400104
- Hunter, J. A., Hazelwood, R. R., & Slesinger, D. (2000). Juvenile-perpetrated sex crimes: Patterns of offending and predictors of violence. *Journal of Family Violence*, 15(1), 81-93. doi: 10.1023/A:1007553504805
- Hunter, J. A., Figueredo, A. J., Malamuth, N. M., & Becker, J. V. (2003). Juvenile sex offenders:

- Toward the development of a typology. *Sexual Abuse: Journal of Research and Treatment*, 15(1), 27-48. doi: 10.1023/A:1020663723593
- Jespersion, A.F., Lalumiere, M.L., & Seto, M.C. (2009). Sexual abuse history among adult sex offenders and non-sex offenders: A meta-analysis. *Child Abuse & Neglect: The International Journal*, 33, 179-192.
- Kalmus, E., & Beech, A. R. (2003). Forensic assessment of sexual interest: A review. *Aggression and Violent Behavior*, 10, 193-217. doi: 10.1016/j.avb.2003.12.002
- Keelan, C., & Fremouw, W. (2013). Child versus peer/adult offenders: A critical review of the juvenile sex offender literature. *Aggression and Violent Behavior*. doi:10.1016/j.avb.2013.07.026
- Lalumiere, M.L., Quinsey, V.L., Harris, G.T., Rice, M.E., & Trautrimas, C. (2003). Are rapists differentially aroused by coercive sex in phallometric assessments? *Annals of the New York Academy of Sciences*, 989, 211-224.
- Lambie, I., Seymour, F., Lee, A., & Adams, P. (2002). Resiliency in the victim-offender cycle in male sexual abuse. *Sexual Abuse: A Journal of Research and Treatment*, 14(1), 31-48. doi: 10.1023/A:1013077426928
- Langstrom, N., Babchishin, K.M., Fazel, S., Lichtenstein, P., & Frisell, T. (2015). Sexual offending runs in families: A 37-year nationwide study. *International Journal of Epidemiology*, 1-8, doi: 10.1093/ije/dyv029
- Leroux, E.J., Pullman, L.E., Motayne, G., & Seto, M.C. (2014). Victim age and the generalist versus specialist distinction in adolescent sexual offending. *Sexual Abuse: A Journal of Research and Treatment*, Advance online publication, 1-17. doi: 10.1177/1079063214535814

- Lussier, P., & Blokland, A. (2014). The adolescence-adulthood transition and Robins's continuity paradox: Criminal career patterns of juvenile and adult sex offenders in a prospective longitudinal birth cohort study. *Journal of Criminal Justice*, 42, (153-163. doi: 10.1016/j.jcrimjus.2013.07.004
- Mackaronis, J. E., Strassberg, D. S., & Marcus, D. K. (2011). The latent structure of multiphasic sex inventory- assessed pedophilic interest. *Psychological Assessment*, 23(4), 1017-1022. doi: 10.1037/a0024625
- Mallet, P. & Herbe, D. (2011). Does knowledge about sexuality prevent adolescents from developing rape-supportive beliefs? *Journal of Sex Research*, 48(4), 372-380. doi: 10.1080/00224491003794048
- Maniglio, R. (2011). The role of childhood trauma, psychological problems, and coping in the development of deviant sexual fantasies in sexual offenders. *Clinical Psychology Review*, 31, 748-756. doi: 10.1016/j.cpr.2011.03.003
- McHugh, M. L. (2013). The Chi-square test of independence. *Biochemia Medica*, 23(2), 143-149. doi: 10.111613/BM.2013.018
- Murphy, W. D., DiLillo, D., Haynes, M. R., Steere, E. (2001). An exploration of factors related to deviant sexual arousal among juvenile sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 13(2), 91-103. doi: 10.1177/107906320101300203
- Nandy, K. (2012). Understanding and quantifying effect sizes [pdf document]. Retrieved from <http://nursing.ucla.edu/workfiles/research/Effect%20Size%204-9-2012.pdf>
- Nichols, H. R., & Molinder, I. (2010). *Psychological assessment of sex offenders*. Retrieved from <http://www.nicholsandmolinder.com/>
- Nichols, H. R., & Molinder, I. (2002). *Multiphasic Sex Inventory-II Clinician's Handbook*. Fircrest, WA: Nichols & Molinder Assessments, Inc.

- O'Reilly, G., & Carr, A. (2006). Assessment and treatment of criminogenic needs. In H. E. Barbaree & W. L. Marshall (Eds.), *The Juvenile Sex Offender* (pp. 189-218). New York, NY: The Guilford Press.
- Parks, G. A., & Bard, D. E. (2006). Risk factors for adolescent sex offender recidivism: Evaluation of predictive factors and comparison of three groups based upon victim type. *Sexual Abuse: Journal of Research and Treatment*, 18, 319-342. doi:10.1177/107906320601800402
- Prentky, R., & Righthand, S. (2003). *Juvenile Sex Offender Assessment Protocol-II Manual*. Unpublished Manuscript. Retrieved from <http://www.csom.org/pubs/jsoap.pdf>
- Pullman, L., & Seto, M. (2012). Assessment and treatment of adolescent sexual offenders: Implications of recent research on generalist versus specialist explanations. *Child Abuse & Neglect*, 36, 203-209. doi: [10.1016/j.chiabu.2011.11.003](https://doi.org/10.1016/j.chiabu.2011.11.003)
- Richardson, G., Kelly, T. P., Bhate, S. R., & Graham, F. (1997). Group differences in abuser and abuse characteristics in a British sample of sexually abusive adolescents. *Sexual Abuse: Journal of Research and Treatment*, 9, 239-257. doi: 10.1177/107906329700900307
- Ryan, G. (2010). Sexually abusive youth: Defining the problem and the population. In G. Ryan, T. Leversee, & S. Lane (Eds.), *Juvenile Sexual Offending* (pp. 3-8). New Jersey: John Wiley & Sons, Inc.
- Schenk, A., Cooper-Lehki, C., Keelan, C., & Fremouw, W. (2014). Underreporting of bestiality among juvenile sex offenders: Polygraph versus self-report. *Journal of Forensic Sciences*, 59(2), 540-542. doi: 10.1111/1556-4029.12332
- Schlank, A. M. (1995). The utility of the MMPI and the MSI for identifying a sexual offender typology. *Sexual Abuse: A Journal of Research and Treatment*, 7(3), 185- 194. doi: 10.1177/107906329500700302

- Seto, M.C. (2008). *Pedophilia and sexual offending against children: Theory, assessment, and intervention*. Washington, D.C.: American Psychological Association.
- Seto, M. C., & Lalumiere, M. L. (2010). What is so special about male adolescent sexual offending? A review and test of explanations through meta-analysis. *Psychological Bulletin*, 136(4), 526-575. doi: 10.1037/a0019700
- Shaw, R. G. & Mitchell-Olds, T. (1993). Anova for unbalanced data: An overview. *Ecology*, 74(6), 1638-1645, doi: 10.2307/1939922
- Simons, D.A., Wurtele, S.K., & Durham, R.L. (2008). Developmental experiences of child sexual abusers and rapists. *Child Abuse & Neglect*, 32, 549-560.
doi: 10.1016/j.chiabu.2007.03.027
- Skubic-Kemper, T., & Kistner, J.A. (2010). An evaluation of classification criteria for juvenile sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 22 (2), 17-190. doi: 10.1177/1079063210366270
- Skubic-Kemper, T., & Kistner, J. A. (2007). Offense history and recidivism in three victim-aged based groups of juvenile sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 19(4), 409-424. doi: 10.1177/107906320701900406
- Smallbone, S. (2006). Social and psychological factors in the development of delinquency and sexual deviance. In H. E. Barbaree & W. L. Marshall (Eds.), *The Juvenile Sex Offender* (pp. 105-127). New York, NY: The Guilford Press.
- Stinson, J.D., & Becker, J.V. (2008). Assessing sexual deviance: A comparison of physiological, historical, and self-report measures. *Journal of Psychiatric Practice*, 14 (6), 379-388. doi: 10.1097/01.pra.0000341892.51124.85
- Van Wijk, A., van Horn, J., Bullens, R., Bijleveld, C., & Doreleijers, T. (2005). Juvenile sex offenders: A group on its own? *International Journal of Offender Therapy and*

Comparative Criminology, 49(25), 25-36. doi: 10.1177/0306624X04270788

Veneziano, C., Veneziano, L., & LeGrand, S. (2000). The relationship between adolescent sex offender behaviors and victim characteristics with prior victimization. *Journal of Interpersonal Violence*, 15(4), 363-374. doi: 10.1177/088626000015004002

Whittaker, M.K., Brown, J., Beckett, R., & Gerhold, C. (2006). Sexual knowledge and empathy: A comparison of adolescent child molesters and non-offending adolescents. *Journal of Sexual Aggression*, 12(2), 143-154. doi: 10.1080/13552600600823621

Worling, J.R. (1995a). Adolescent sex offenders against females: Differences based on the age of their victims. *International Journal of Offender Therapy and Comparative Criminology*, 39(3), 276-293. doi: 10.1177/0306624X9503900308

Worling, J.R. (1995b). Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims. *Journal of Abnormal Psychology*, 104(4), 610-613. doi: 10.1037/0021-843X.104.4.610

Zakireh, B., Ronis, S. T., & Knight, R. A. (2008). Individual beliefs, attitudes, and victimization histories of male juvenile sexual offenders. *Sexual Abuse: Journal of Research and Treatment*, 20, 323-351. doi:10.1177/1079063208322424

Zolondek, S.C., Abel, G.G., Northey, W.F., & Jordan, A.D. (2001). The self-reported behaviors of juvenile sex offenders. *Journal of Interpersonal Violence*, 16, 73-85.
doi: 10.1177/088626001016001005

Figure 1. Participant Flow.

Table 1

Summary of Participants by Facility and Comparison Groups based on Index Charge

	Child Offenders	Peer Offenders	Total
Chestnut Ridge Center	35	8	43
Harriet B. Jones	18	13	31
Total	53	21	74

Table 2

Summary of Participants by Facility and Comparison Groups based on All Charges

	Child Offenders	Peer Offenders	Mixed Offenders	Total
Chestnut Ridge Center	29	7	7	43
Harriet B. Jones	14	10	7	31
Total	43	17	14	74

Table 3

Kappa Statistics of Interrater Agreement for Categorical Variables

Variable	Kappa Value
Ethnicity	1.00
Charges	1.00
Victim-Age Group	1.00
Victim Gender	1.00
Victim Relationship to Offender	1.00
Offense Severity Index	1.00
Weapon used during offense	1.00
Alcohol/drugs used during offense	1.00
Prior Sexual Charge	1.00
Prior Violent Charge	1.00
Prior Status/Non-violent Charge	.700
Physical Abuse History	.857
Sexual Abuse History	1.00
Emotional Abuse History	.815
Neglect History	.602
Domestic Violence History	.708

Note. Any discrepancy between primary researcher and graduate student coder were discussed and resolved.

Table 4

Descriptive Statistics of Categorical Demographic and Victim Characteristic Variables

	Child Offender (<i>n</i> = 53)		Peer Offender (<i>n</i> = 21)		<i>p</i> /Fisher		
	n	%	n	%	χ^2	Exact	Φ , <i>V</i>
Offender Ethnicity					1.239	.554	.129
Caucasian	50	94.3	21	100.0			
African American	3	5.7	0	0.0			
Sexual Orientation							
Heterosexual	44	83.0	16	76.2	.457	.499	.079
Homosexual	3	5.7	4	19.0	3.147	.095	.206
Afraid Gay	4	7.5	3	14.3	.797	.397	.104
Sex with both	29	54.7	8	38.1	1.662	.197	.150
Victim Gender					.154	.695	.046
Male	15	28.3	5	23.8			
Female	38	71.7	16	76.2			

(Table 4 continued)

Victim Relationship					1.705	.203	.152
Related	34	64.2	10	47.6			
Unrelated	19	35.8	11	52.4			
Weapon used					.814	1.000	.105
Yes	2	3.8	0	0.0			
No	51	96.2	21	100.0			
Alcohol/Drug used					1.675	.572	.150
Yes	4	7.5	0	0.0			
No	49	92.5	21	100.0			
Prior Sexual Charges					2.558	.284	.186
Yes	0	0.0	1	4.8			
No	53	100.0	20	95.2			
Prior Violent Charges					2.638	.135	.189
Yes	2	3.8	3	14.3			
No	51	96.2	18	85.7			

(Table 4 continued)

Prior Status/Non-violent					4.353	.037	.243
Charges							
Yes	5	9.4	6	28.6			
No	48	90.6	15	71.4			
<hr/>							
	Child Offenders		Peer Offenders				
	(n = 38)		(n = 18)				
	<hr/>		<hr/>				
	n	%	n	%	χ^2	<i>p</i> /Fisher Exact	Φ , <i>V</i>
Charges					5.585	.134	.316
Sexual Abuse	11	28.9	3	16.7			
Sexual Assault	25	65.8	11	61.1			
Other	2	5.3	2	11.1			
No charges	0	0.0	2	11.1			

(Table 4 continued)

	Child Offenders	Peer Offenders
--	-----------------	----------------

	(n = 40)		(n = 18)		χ^2	<i>p</i> /Fisher	
	n	%	n	%		Exact	Φ , <i>V</i>
Prior Sex Offender					3.444	.063	.244
Treatment							
Yes	12	30.0	10	55.6			
No	28	70.0	8	44.4			

Note. Statistically significant differences between the two groups are in bold. ϕ (Phi) = Used to measure effect size of categorical variables with two levels; *V* (Cramer's V) = Used to measure effect size of categorical variables with more than two levels. Effect sizes: small = 0.10, medium = 0.30, large = 0.50.

Table

5

MANOVA of continuous demographic and victim characteristic variables

	Child Offender (<i>n</i> = 53)		Peer Offender (<i>n</i> = 21)		<i>F</i>	<i>p</i>	<i>Partial</i> <i>η</i> ²
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Current Age	16.96	1.57	17.11	1.81	.133	.716	.002
Age at first offense	13.26	2.40	13.29	1.98	.001	.971	.000
Offense Severity Index	3.17	1.25	3.86	1.24	4.566	.036	.060
Mean age of victims	6.24	2.11	12.36	9.59	19.536	.000	.213
Median age of victims	6.00		10.00				

Note. Mean age of victims is based on victim age in index offense. Statistically significant differences between the two groups are in bold. Partial η effect sizes: small = 0.01, medium = 0.06, large = 0.14.

6

MANOVA of Continuous MSI Variables- Sexual Deviance Scales

	Child Offender (<i>n</i> = 50)		Peer Offender (<i>n</i> = 21)	

Table

	Child Offender (<i>n</i> = 53)		Peer Offender (<i>n</i> = 21)				<i>Partial</i> η^2
	M	SD	M	SD	<i>F</i>	<i>p</i>	
Child Molestation	19.00	10.57	13.52	10.63	3.958	.051	.054
Rape	4.06	5.54	6.67	7.24	2.715	.104	.038
Exhibitionism	6.94	5.02	4.57	5.16	3.234	.076	.045
Voyeurism	3.18	3.60	3.48	4.23	.090	.765	.001

7

MANOVA of Continuous MSI Variables- Emotional Disorder Measures

	Child Offender (<i>n</i> = 53)		Peer Offender (<i>n</i> = 21)				<i>Partial</i> η^2
	M	SD	M	SD	<i>F</i>	<i>p</i>	
Socio-Sexual Inadequacies	6.13	4.86	5.90	3.66	.037	.847	.001
Emotional Neediness	8.17	5.43	9.00	4.86	.373	.544	.005

Table

Cognitive Distortions/	7.09	6.76	4.58	.090	.765	.001
Immaturity	4.19					

8

MANOVA of Continuous MSI Variables- Emotional Disorder Measures

	Child Offender (<i>n</i> = 47)		Peer Offender (<i>n</i> = 17)				<i>Partial</i> η^8
	M	SD	M	SD	<i>F</i>	<i>p</i>	
Body Image	2.96	2.69	4.00	2.32	2.013	.161	.031
Sexual Functioning	1.26	1.51	3.00	5.16	4.839	.032	.072

⁸ *Note.* Statistically significant differences between the two groups are in bold. Partial η effect sizes: small = 0.01, medium = 0.06, large = 0.14.

Table
9*Descriptive Statistics and ANOVA's of Trauma Variables*

	Child		Peer				
	Offender		Offender				
	(n = 52)		(n = 20)				
	n	%	n	%	χ^2	p	Φ, V
Physical Abuse					.580	.446	.090
Yes	26	50.0	8	40.0			
No	26	50.0	12	60.0			
Sexual Abuse					.545	.460	.087
Yes	31	59.6	10	50.0			
No	21	40.4	10	50.0			
Emotional Abuse					.596	.716	.091
Yes	9	17.3	2	10.0			
No	43	82.7	18	90.0			
Neglect					1.991	.158	.166
Yes	10	19.2	7	35.0			

Table

No

42 80.8 13 65.0

(Table 9 continued)

Domestic Violence						1.573	.210	.148
Yes	13	25.0	8	40.0				
No	39	75.0	12	60.0				
	Child		Peer					
	Offender		Offender					
	(n = 30)		(n = 9)					
	n	%	n	%	χ^2	p	Φ, V	
Gender of Perpetrator					1.981	.371	.225	
Male	23	76.7	5	55.6				
Female	3	10.0	1	11.1				
Both	4	13.3	3	33.3				

(Table 9 continued)

	Child		Peer				
	Offender		Offender				
	<i>(n = 29)</i>		<i>(n = 9)</i>				
					Likelihood		
	n	%	n	%	ratio	<i>p</i>	Φ, V
Relationship with					9.367	.009	.504
Perpetrator							
Related	16	55.2	1	11.1			
Not Related	10	34.5	3	33.3			
Both	3	10.3	5	55.6			
	Child		Peer				
	Offender		Offender				
	<i>(n = 27)</i>		<i>(n = 9)</i>				
	M	SD	M	SD	<i>F</i>	<i>p</i>	<i>Partial η^2</i>

Age at Sexual	7.07	3.57	6.11	3.30	.508	.481	.015
Victimization							

Note. Statistically significant differences between the two groups are in bold. ϕ/V effect sizes: small = 0.10, medium = 0.30, large = 0.50. *Partial η^2* effect sizes: small = 0.01, medium = 0.06, large = 0.14.

Table 10

Logistic Regression Predicting Child and Peer Offenders

	β	<i>SE</i>	Wald	<i>df</i>	Sig.	Exp(β)	95% Confidence Interval for Exp(β)	
							Lower	Upper
Prior Status Charge	1.451	.759	3.654	1	.056	4.268	.964	18.897
Sexual Functioning Index	.234	.189	1.526	1	.217	1.263	.872	1.830
Offense Severity Index	.238	.241	.978	1	.323	1.269	.791	2.035
Child Molestation Scale	-.060	.031	3.838	1	.050	.942	.887	1.000
Overall Model Evaluation						χ^2	<i>df</i>	<i>p</i>
Likelihood Ratio Test						14.129	4	.007

Note. 0 = child offender; 1 = peer offender; Nagelkerke $R^2 = .25$.

Table 11

Descriptive Statistics of Categorical Demographic and Victim Characteristic Variables

	Child Offenders (n = 43)		Peer Offenders (n = 17)		Mixed Offenders (n = 14)		$\chi^2/$ Likelihood ratio <i>p</i> <i>V</i>		
	n	%	n	%	n	%			
Offender							2.254	.324	.174
Ethnicity									
Caucasian	40	93.0	17	100.0	14	100.0			
African American	3	7.0	0	0.0	0	0.0			
Sexual Orientation									
Heterosexual	36	83.7	14	82.4	10	71.4	1.064	.588	.120
Homosexual	3	7.0	3	17.6	1	7.1	1.728	.422	.153
Afraid Gay	4	9.3	2	11.8	1	7.1	.194	.907	.051

Sex with both	23	53.5	7	41.2	7	50.0	.739	.691	.100
---------------	----	------	---	------	---	------	------	------	------

(Table 11 continued)

Victim Gender							22.699	.000	.382
---------------	--	--	--	--	--	--	---------------	-------------	-------------

Male	11	25.6	3	17.6	4	28.6			
------	----	------	---	------	---	------	--	--	--

Female	26	60.5	14	82.4	2	14.3			
--------	----	------	----	------	---	------	--	--	--

Both	6	14.0	0	0.0	8	57.1			
------	---	------	---	-----	---	------	--	--	--

Victim							30.668	.000	.499
--------	--	--	--	--	--	--	---------------	-------------	-------------

Relationship

Related	29	67.4	8	47.1	3	21.4			
---------	----	------	---	------	---	------	--	--	--

Unrelated	12	27.9	9	52.9	2	14.3			
-----------	----	------	---	------	---	------	--	--	--

Both	2	4.7	0	0.0	9	64.3			
------	---	-----	---	-----	---	------	--	--	--

Weapon used								.462	.144
-------------	--	--	--	--	--	--	--	------	------

1.545

Yes	1	2.3	0	0.0	1	7.1			
-----	---	-----	---	-----	---	-----	--	--	--

No	42	97.7	17	100.0	13	92.9
----	----	------	----	-------	----	------

Table 11 continued)

Alcohol/Drug							1.262	.532	.131
used									
Yes	3	7.0	0	0.0	1	7.1			
No	40	93.0	17	100.0	13	92.9			
Prior Sexual							3.399	.183	.214
Charges									
Yes	0	0.0	1	5.9	0	0.0			
No	43	100.0	16	94.1	14	100.0			
Prior Violent							.983	.612	.115
Charges									
Yes	2	4.7	2	11.8	1	7.1			
No	41	95.3	15	88.2	13	92.9			

Status/Non-violent							3.898	.142	.230
Yes	4	9.3	5	29.4	2	14.3			
No	39	90.7	12	70.6	12	85.7			

(Table 11 continued)

	Child Offenders (n = 29)		Peer Offenders (n = 14)		Mixed Offenders (n = 13)		χ^2	<i>p</i>	<i>V</i>
	n	%	n	%	n	%			
Charges							6.260	.395	.236
Sexual Abuse	10	34.5	2	14.3	2	15.4			
Sexual Assault	18	62.1	10	71.4	8	61.5			
Other	1	3.4	1	7.1	2	15.4			
No charges	0	0.0	1	7.1	1	7.7			

(Table 11 continued)

	Child Offenders		Peer Offenders		Mixed Offenders				
--	--------------------	--	-------------------	--	--------------------	--	--	--	--

	(n = 32)		(n = 14)		(n = 12)		χ^2	<i>p</i>	<i>V</i>
	n	%	n	%	n	%			
Prior Sex							8.579	.014	.385
Offender									
Treatment									
Yes	7	21.9	7	50.0	8	66.7			
No	25	78.1	7	50.0	4	33.3			

Note. Statistically significant differences between the two groups are in bold. *V* effect sizes: small = 0.10, medium = 0.30, large = 0.50.

Table

12

MANOVA of continuous demographic and victim characteristic variables

	Child Offenders (n = 43)		Peer Offenders (n = 17)		Mixed Offenders (n = 14)				<i>Partial η^2</i>
	M	SD	M	SD	M	SD	<i>F</i>	<i>p</i>	
Current Age	17.00	1.53	16.81	1.78	17.25	1.81	.272	.762	.008
Age at First Offense	13.77_a	2.19	13.41_{ab}	1.91	11.57_b	2.24	5.608	.005	.136
Offense Severity Index	3.26	1.26	3.88	1.22	3.07	1.33	1.972	.147	.053
Mean Age of Victims	5.78_a	1.96	13.00_b	10.61	8.62_{ab}	1.52	11.426	.000	.243
Median Age of Victims	6.00		10.00		9.00				

Note. Statistically significant differences between the two groups are in bold.

Mean age of victims accounted for all victims from all offenses noted in psychological evaluation

Partial η^2 effect sizes: small = 0.01, medium = 0.06, large = 0.14.

Table

^{a, b} Means with differing subscripts within rows are significantly different from each other

13

MANOVA of Continuous MSI Variables- Sexual Deviance Scales

	Child		Peer		Mixed				
	Offenders		Offenders		Offenders				
	(n = 40)		(n = 17)		(n = 14)				
	M	SD	M	SD	M	SD	<i>F</i>	<i>p</i>	<i>Partial η²</i>
Child	19.55_a		11.12_b		18.79_{ab}	10.96	4.116	.021	.108
Molestation		10.46		9.56					
Rape	4.20	5.79	4.94	6.03	6.50	7.40	.721	.490	.021
Exhibitionism	7.18	4.82	3.94	4.90	6.36	5.79	2.460	.093	.067
Voyeurism	3.08	3.28	3.12	4.18	4.00	4.66	.324	.724	.009

Note. Statistically significant differences between the two groups are in bold.*Partial η^2* effect sizes: small = 0.01, medium = 0.06, large = 0.14. ^{a, b} Means with differing subscripts within rows are significantly different from each other 14*Descriptive Statistics and ANOVA's of Trauma Variables*

	Child	Peer	Mixed
	Offenders	Offenders	Offenders

Table

	(n = 42)		(n = 16)		(n = 14)		χ^2	<i>p</i>	<i>V</i>
	n	%	n	%	n	%			
Physical Abuse									
Yes	23	54.8	5	31.3	6	42.9			
No	19	45.2	11	69.8	8	57.1			
Sexual Abuse							3.889	.143	.232
Yes	23	54.8	7	43.8	11	78.6			
No	19	45.2	9	56.3	3	21.4			
Emotional Abuse							1.479	.477	.143
Yes	8	19.0	1	6.3	2	14.3			
No	34	81.0	15	93.8	12	85.7			

Table

(Table 14 continued)

Neglect							1.194	.551	.129
Yes									
	8	19.0	5	31.3	4	28.6			
No									
	34	81.0	11	68.8	10	71.4			
Domestic							2.233	.327	.176
Violence									
Yes									
	11	26.2	7	43.8	3	21.4			
No									
	31	73.8	9	56.3	11	78.6			
Child									
Offenders									
(n = 20)									
Peer									
Offenders									
(n = 6)									
Mixed									
Offenders									
(n = 10)									

Partial

Table

	M	SD	M	SD	M	SD	<i>F</i>	<i>p</i>	η^2
Age at Sexual Victimization	6.80	3.71	7.17	2.86	6.70	3.68	.034	.967	.002
(Table 14 continued)									
	Child Offenders (n = 22)		Peer Offenders (n = 6)		Mixed Offenders (n = 11)				
	n	%	n	%	n	%	χ^2	<i>p</i>	<i>V</i>
Gender of Sexual Abuse Perp.							7.555	.109	.311
Male	16	72.7	2	33.3	10	90.9			
Female	3	13.6	1	16.7	0	0.0			
Both	3	13.6	3	50.0	1	9.1			

Note. Statistically significant differences between the two groups are in bold.

V effect sizes: small = 0.10, medium = 0.30, large = 0.50. *Partial η^2* effect sizes: small = 0.01, medium = 0.06, large = 0.14.

15

Discriminant Function Analysis Structure Matrix

	Function	
	1	2
Mean Age of Victims	.814	.363
Age at First Offense	-.298	.904
Child Molestation Scale	-.427	-.476

Table

16

Discriminant Function Analysis Group Centroids

	Function	
	1	2
Child Offenders	-.554	.080
Peer Offenders	.981	.395
Mixed Offenders	.489	-.720

17

Discriminant Function Analysis Classification Table

Actual Group Membership	Predicted Group Membership			Total
	Child Offender	Peer Offender	Mixed Offender	
Child Offender	39 (92.9%)	0 (0%)	3 (7.1%)	42
Peer Offender	10 (58.8%)	6 (35.3%)	1 (5.9%)	17
Mixed offender	7 (50%)	1 (7.1%)	6 (42.9%)	14

Table

Appendix A

Data Coding Sheet

Participant ID: _____

Date of Collection: _____

Data Collector: _____

Date of Birth: _____

Ethnicity: Caucasian African American Hispanic Asian Native American

Other: _____

	Offender Age (at time of offense)	Victim Age (at time of offense)	Victim Gender	Relationship to Offender: (i.e. sibling, cousin, step family, acquaintance, stranger)	Offense (i.e. fondling, masturbation, oral sex, penetration)	Index Offense?
Index Victim 1						
Index Victim 2						
Index Victim 3						
Prior Victim 1						
Prior Victim 2						
Prior Victim 3						

Weapon (object) used:

YES NO

If Yes, Describe object:

Alcohol/Drugs during offense: YES NO
 If Yes, describe substance:

Prior Charges:

Sexual YES NO Explain:

Violent YES NO Explain:

Nonviolent or Status YES NO Explain:

Victimization History

Physical Abuse: YES NO

Sexual Abuse: YES NO

Emotional Abuse: YES NO

Neglect: YES NO

Witnessed Domestic Violence: YES NO

Type of Abuse (e.g., physical, sex, neglect, emotional)	What happened? (e.g., Hitting, kicking, biting, fondling, oral sex, penetration)	Relation of Perpetrator to Victim?	Perpetrator Gender	How old was offender?

History of Suicidal Behavior (ideations and/or attempts): YES NO NOT NOTED

If Yes describe:

History of Cruelty towards animals: YES NO NOT NOTED

If Yes, Describe:

History of Fire Setting: YES NO NOT NOTED

If Yes, Describe:

Treatment History:

Name of Placement	Type of Placement (e.g., group home, treatment facility, correctional institution)	Length of time in placement	Completed program?

Special Education Classes? YES NO

Disciplinary Problems in School? YES NO

Suspended from school? YES NO

Expelled from school? YES NO

IQ: What measure: _____ Full Scale Score: _____
 Verbal IQ: _____ Performance IQ: _____ Non-Verbal
 IQ: _____ Appendix B

Tables of Non-Significant Results

Table B1

MANOVA of Continuous MSI Variables- Validity Scales

Child Offender	Peer Offender
(<i>n</i> = 42)	(<i>n</i> = 13)
_____	_____

						<i>p</i>	<i>Partial</i> η^2
	M	SD	M	SD	<i>F</i>		
Social Sexual Desirability	25.55	3.50	25.54	3.20	.000	.993	.000
Sexual Obsessions	9.71	5.28	8.31	5.01	.720	.400	.013
Dissimulation	6.45	3.68	6.08	2.84	.114	.737	.002
Lie	5.60	4.42	6.46	4.16	.392	.534	.007

Table
B2*MANOVA of Continuous MSI Variables- Information and Referral Issues*

	Child Offender		Peer Offender				
	(n = 53)		(n = 21)				
							<i>Partial</i>
	M	SD	M	SD	<i>F</i>	<i>p</i>	η^2
Sexual Knowledge	15.51	3.10	15.14	2.63	.228	.634	.003
Suicide Index	2.89	2.82	4.05	3.01	2.456	.121	.033
Sexual Ethics: Child	1.66	.68	1.38	.80	2.295	.134	.031
Sexual Ethics: Force	1.79	.53	1.57	.75	2.046	.157	.028

Table
B3*MANOVA of Continuous MSI Variables- Additional Paraphilias*

	Child Offender (<i>n</i> =53)		Peer Offender (<i>n</i> = 21)		<i>F</i>	<i>p</i>	<i>Partial</i> η^2
	M	SD	M	SD			
Pornography	1.72	2.27	1.38	1.86	.362	.549	.05
Transvestism	1.08	1.72	1.05	1.83	.004	.951	.000
Fetishism	1.70	1.80	1.57	1.50	.081	.777	.001
Sexual Sadism	.68	1.16	.76	1.26	.073	.788	.001

Table
B4

MANOVA of Continuous MSI Variables- Offense Rationale Measures

	Child Offender (<i>n</i> = 53)		Peer Offender (<i>n</i> = 21)			<i>Partial</i>	
	M	SD	M	SD	<i>F</i>	<i>p</i>	η^2
Denial	7.34	3.85	8.38	5.52	.850	.360	.012
Justification	2.94	2.73	4.10	3.27	2.392	.126	.032

Table
B5*MANOVA of Continuous MSI Variables- Validity Scales*

	Child		Peer		Mixed					
	Offenders		Offenders		Offenders					
	(n = 33)				(n = 10)					
	(n = 12)									
							</			

Table

Lie	5.30	4.13	6.80	3.97	6.33	5.26	.564	.572	.021
-----	------	------	------	------	------	------	------	------	------

B6

MANOVA of Continuous MSI Variables- Information and Referral Issues

	Child		Peer		Mixed					
	Offenders		Offenders		Offenders					
	(n = 43)				(n = 17)					
	(n = 14)									
							<i>Partial</i>			
	SD		SD		SD		<i>F</i>	<i>p</i>	η^2	
	M		M		M					
Sexual Knowledge	15.42	3.06	15.35	2.60	15.43	3.25	.003	.997	.000	

Table

Suicide Index	3.12	2.90	3.65	3.18	3.00	2.72	.247	.782	.007
Sexual Ethics: Child	1.74	.62	1.41	.80	1.29	.83	2.880	.063	.075
Sexual Ethics: Force	1.84	.48	1.65	.70	1.50	.76	1.901	.157	.051

B7

MANOVA of Continuous MSI Variables- Additional Paraphilias

Child	Peer	Mixed
Offenders	Offenders	Offenders
(n = 43)		(n = 17)
(n = 14)		

Table

									<i>Partial</i>
	M	SD	M	SD	M	SD	<i>F</i>	<i>p</i>	η^2
Pornography	1.65	2.20	1.35	2.06	1.86	2.25	.215	.807	.006
Transvestism	1.21	1.79	1.18	2.01	.50	1.09	.920	.403	.025
Fetishism	1.74	1.76	1.35	1.54	1.79	1.85	.356	.702	.010
Sexual Sadism	.67	1.13	.82	1.38	.64	1.15	.117	.890	.003

B8

MANOVA of Continuous MSI Variables- Emotional Disorder Measures

	Child	Peer	Mixed
	Offenders	Offenders	Offenders

Table

17)	(n = 43)		(n = 14)		(n = 14)		<i>F</i>	<i>p</i>	<i>Partial</i> η^2
	M	SD	M	SD	M	SD			
Socio-Sexual Inadequacies	6.19	4.84	4.82	3.03	7.21	4.98	1.107	.336	.030
Emotional Neediness	8.37	5.71	7.76	4.41	9.29	4.94	.318	.729	.009
Cognitive Distortions/ Immaturity	7.16	4.33	6.18	4.71	7.50	3.70	.436	.649	.012

B9

MANOVA of Continuous MSI Variables- Emotional Disorder Measures

Table

	Child		Peer		Mixed				
	Offenders		Offenders		Offenders				
	(n = 40)				(n = 15)				
	(n = 9)								

Table

	Offenders (n = 43) (n = 14)		Offenders		Offenders (n = 17)				
	M	SD	M	SD	M	SD	<i>F</i>	<i>p</i>	<i>Partial</i> η^2
Denial	7.49	4.12	9.24	5.41	6.14	3.28	2.032	.139	.054
Justification	3.02	2.86	4.24	3.31	2.86	2.51	1.234	.297	.034