

# The Relation of Familiarity With Sexual Abusers to Subsequent Developmental Adaptation in Youths Who Have Sexually Offended

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## Abstract

The present study explored the effects of child sexual abuse (CSA) on the adaptation of male juveniles who subsequently sexually offended (JSOs;  $n = 178$ ; age,  $M = 16.05$  years,  $SD = 0.27$ , range = 12-22). It examined multiple levels of interpersonal closeness between the perpetrators of sexual abuse and their JSO victims. JSOs who were sexually abused by older children or adults who cohabitated with them for at least 3 months reported higher levels of emotional dysregulation, callousness/manipulativeness, and sexualization than did both JSOs who were sexually abused by someone they had never lived with and JSOs who reported no experiences of sexual abuse. Implications of these findings are discussed.

## Keywords

juveniles, sexual abuse, sexual aggression, callous/manipulative, emotional dysregulation, sexualization, hypersexuality

Juveniles who have sexually offended (JSOs) constitute a heterogeneous group that is diverse in background, offender behavior, and social functioning (Hunter, Hazelwood, & Slesinger, 2000; Knight & Prentky, 1993). Until recently, the assumption that sexually coercive adolescents were comparable with their adult counterparts has often informed assessment, treatment, and policy in a direction that largely ignores the needs and true trajectories of JSOs (Hunter, Figueredo, Malamuth, & Becker, 2003). Direct

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study of JSOs rather than inferences from research on adults who sexually offend (ASOs) is essential to provide crucial information for treatment and management, and to yield the data on which models for the prevention of sexual assaults by youths can be constructed.

Prominent among the development experiences that differentiate both JSOs and ASOs from their non-sexual criminal counterparts and from community samples is the experience of child sexual abuse (CSA). CSA encompasses a diverse set of experiences and results in highly varied outcomes for survivors. Estimates of CSA prevalence in the general population vary widely, but the rates have been found to be higher among both JSOs and ASOs than both criminal and general population controls (Jespersen, Lalumière, & Seto, 2009; Seto & Lalumière, 2010). Moreover, JSOs report CSA more frequently than ASOs. Approximately 31% to 71% of JSOs report experiencing sexual abuse as children (e.g., 71.4%, Edwards et al., 2005; 60.5%, Gunn, 2008; 43.3%, Hunter & Figueredo, 2000; 31%, Worling, 1995), whereas between approximately 19% and 42% of ASOs report a history of CSA (e.g., 38%, Glasser et al., 2001; 41.7%, Graham, Kimonis, Wasserman, & Kline, 2012; 19%, Kukla, 2003). In the present study, 67% of participants ( $n = 120$ ) reported at least one experience of CSA.

The experience of CSA has been linked with long-term neurobiological changes, clinical disorders, and both internalizing and externalizing problems, including depression, substance abuse, anxiety, suicidality, aggression, sexualization, and delinquency (Beitchman, Zucker, Hood, DaCosta, & Akman, 1991; Heim, Newport, Mletzko, Miller, & Nemeroff, 2008; Kendall-Tackett, Williams, & Finkelhor, 1993; Paolucci, Genuis, & Violato, 2001). Although some survivors of CSA report few or no lasting negative effects from their abuse or effects of low intensity (Rind, Bauserman, & Tromovitch, 1998), the short- and long-term effects of CSA vary widely even among individuals with similar life experiences. The variance in the effect of CSA on survivors can be at least partially attributed to the complexity of the interactions between biological and environmental factors (Beaver, 2008).

Over the past decades, potential moderators of the effects of CSA have been investigated, including timing (i.e., sensitive periods for brain development), severity, and duration of CSA as well as relationship with the perpetrator and the presence and cumulative effects of multiple forms of maltreatment (Andersen, Tomada, Vincow, Polcari, & Teicher, 2008; Burton & Meezan, 2004; Burton, Miller, & Shill, 2002; Daversa & Knight, 2007; Grabell & Knight, 2009). Both neurobiological information and behavioral data support hypotheses that early CSA significantly affects development (De Bellis, Spratt, & Hooper, 2011; Grabell & Knight, 2009). Findings of differential effects within juvenile offender populations have included evidence that JSOs were more likely than their non-sexual juvenile offender counterparts to have experienced CSA that was longer in duration, included penetrative acts, and was perpetrated by relatives or parents (Burton et al., 2002).

In multiple studies on the effects of sexual abuse in JSO populations and in more general samples, the nature of the relationship between the perpetrator(s) and the survivor of CSA has been found to be a critical factor (Burton et al., 2002; Faller, 1989; Kendall-Tackett et al., 1993; Lawyer, Ruggiero, Resnick, Kilpatrick, & Saunders,

2006). The criteria for the classification of familial relationships have, however, varied markedly across studies. Whereas some research has used a framework of strictly biological relationships (e.g., father–daughter incest), in other studies researchers have used a mix of biological and legal definitions of family (e.g., stepfather and biological father incest). The conceptualization of the closeness of a relationship between the one who perpetrates CSA and the child victim has remained largely unexplored. Experientially, primary and secondary caregivers may include multiple individuals of the same gender, grandparents, babysitters, friends, and other individuals who at different times live with or are otherwise engaged with a young person as a caregiver or in a close relationship. Yet, definitions of these relationships have not been empirically scrutinized even within those studies whose researchers purport to measure its effects. Instead, relative importance has been assigned to kinship relationships above all other types. This assumption privileges nuclear/biological families of origin as the most important relationship (and therefore the most devastating one within which CSA can be perpetrated) and minimizes the experiences of youths raised in non-kinship environments including family friends, foster care, and institutions.

Multiple theoretical conceptualizations of the importance of the relationship between a child and the perpetrator(s), and the importance of interpersonal trauma in general, suggest that these relationships require additional research. The present study adopted a theoretical approach that combined social learning theory and theories of trauma. Burton et al. (2002) used Bandura's (1986) social learning theory to explore the concepts of social transmission as a causal factor for adolescent sexual offending. Bandura proposed that it was not simply the presence of a model for a behavior that led to repetition of what was observed and learned, but that other factors made repetition more likely, including (a) increased instances of observation, (b) a longer periods of exposure to the behavior, and (c) the child's attention to the behavior. All of these increased the likelihood that the child would repeat the behavior being observed. Such factors suggest that the cohabitation aspect of a relationship would be critical for predicting future behavior because cohabitants who offend sexually would be more likely to have extensive access over time to their child victims. Among the lessons a survivor of CSA may learn is that the perpetrator is rewarded with feelings of power and control (Fleming & Burton, 2000), the perpetrator experiences a reduction in anxiety (Burton et al., 2002), and the perpetrator experiences sexual gratification through sexually offensive behaviors (Worling, 1995). For young survivors of CSA who are attempting to gain or recover the feelings of control they have lost, to reduce anxiety, or to achieve positive sexual experiences, sexually offending against another may be an easily accessed behavior, especially when their learning model is one that encourages imitation.

The hypothesis that particularly serious negative effects are likely to result from CSA perpetrated by someone to whom the victim is psychologically attached also has its theoretical roots in betrayal trauma theory (BTT; Freyd, 1994). Our conceptualization of relatedness in this study grew from inquiries about attachment in CSA relationships in the histories of JSOs. Attachment deficits have previously been proposed as precursors of both psychopathic traits and sexual offending behaviors against children (Marshall & Barbaree, 1990; Miner et al., 2010; Rich, 2007; Ward & Siebert, 2002).

Attachment theory proposes that early attachment relationships provide an essential experiential basis for all subsequent social connectedness. Consequently, sexual abuse within an attachment relationship has been hypothesized to create a more severe traumatic experience than CSA experienced within other types of relationships (Freyd, 1994; Rich, 2006). The psychological impact of CSA within a close relationship could pose a substantial increase in the cumulative abuse load experienced by the child survivor. Freyd proposed that particularly harmful consequences resulted when a trusted individual in a caretaking role perpetrated CSA against a child who feels close to that individual. Kendall-Tackett and colleagues (1993) criticized reliance on familial relationships as the sole measure of relatedness and recommended the development of improved measures of emotional closeness and caretaking responsibility, because a close relationship with a perpetrator has been found to covary with a longer duration of perpetration, a greater degree of force, more penetration used, and a decreased likelihood of reporting such abuse. Schwartz and Galperin (2002) also point out that in these relationships, sexual arousal “becomes activated prematurely within a context of betrayal, fear, confusion, shame, and violence” (pp. 113-114).

The exploration of CSA as a developmental antecedent to the perpetration of sexually offensive behavior is critical (e.g., Burton, 2003; Daversa & Knight, 2007; Grabell & Knight, 2009). Although the incidence of CSA in JSOs is disproportionately high (Burton, 2003), only a small percentage of individuals who experienced CSA go on to abuse others (Salter et al., 2003; Wolfe, 2007), and CSA does not appear to predict sexual *re*-offending in JSO samples (Worling & Curwen, 2000; Worling & Långström, 2006). For these reasons, it is important to investigate what aspects of CSA are most likely to contribute to specific outcomes, including future sexual perpetration. Moreover, effective intervention and prevention strategies will be enhanced by an understanding of the specific mechanisms that undergird early sexual offending.

Emotional dysregulation and sexualized behaviors have been linked to CSA in multiple samples across genders, risk levels, and ages (Fergusson, Horwood, & Lynskey, 1997; Paolucci et al., 2001; Senn, Carey, & Vanable, 2008). Along with callous/unemotional (CU) traits, these two factors have been identified as critical features of sexual offending (Daversa & Knight, 2007; Frick & White, 2008; Hare, 2003; Knight & Sims-Knight, 2004; Ronis & Knight, 2014; Ward & Beech, 2006). Consequently, it is hypothesized that CSA will covary both with greater emotional dysregulation and sexualization.

Although sexualized behavior in the CSA literature can refer to any number of emotionally or physically risky sexual acts, for the purposes of this study, sexualization specifically refers to the internal processes of sexual compulsivity and sexual fantasizing, as well as the frequency of sexual behaviors. With nearly as many constructs of sexual behaviors/sexualization as theories or tools to measure it, it is difficult to compare results across studies. The conceptualization of sexualization in the present study has been found to constitute a potential risk factor for persistent sexual offending (Driemeyer, Yoon, & Briken, 2011; Kafka & Hennen, 2003; Kingston & Bradford, 2013; Knight, Ronis, & Zakireh, 2009).

In the present study, we examined the role of the relation between CSA perpetrators and JSO victims in subsequent cognitive and behavioral development. We analyzed

the complexity of closeness by operationalizing the victim–perpetrator relationship in which the JSO was victimized in three ways: The perpetrator of CSA was (a) known or unknown to the victim; (b) related or not related to the victim; and (c) cohabitant or non-cohabitant with the victim for (i) any amount of time, (ii) at least 3 months, (iii) at least 6 months, (iv) at least 12 months, and (v) at least 24 months. Previous studies examining the victim–perpetrator relationship have generally used only one or two of the above definitions. No data currently support the predictive superiority of one definition over another. We hypothesized that (a) sexual trauma perpetrated by a known, related, or cohabiting individual would disturb the victim's ability to form healthy relationships as measured by aggression/emotional dysregulation, callousness/manipulativeness, and sexualization more than either CSA perpetrated by an unknown, unrelated, or non-cohabiting individual or the absence of CSA, and (b) cohabitation would be the most potent predictor of subsequent emotional dysregulation, callousness/manipulativeness, and sexualization.

## Method

### *Participants*

The 178 JSOs assessed in the present study were sampled from inpatient treatment centers in Maine, Massachusetts, and Minnesota. All participants had been adjudicated for at least one sexual crime (an assault that was sexually motivated and involved physical contact) against a victim of any age. All index offenses occurred before the JSO turned 18 years of age. The average period of institutionalization at the time of testing was 1 to 2 years. The mean age of the sample at the time of testing was 16.05 years ( $SD = 0.27$ , range = 12–22). The sample was ethnically diverse (African American = 15.2%, Asian = 2.2%, Caucasian = 57.5%, Hispanic = 9.6%, Native American = 2.2%, Other = 12.9%). Two thirds ( $n = 120$ ) of participants reported experiencing CSA as a child. Additional information, not analyzed in this article, such as the number of perpetrators and their relationships to participants, is described in Table 1. Of this group, 14% ( $n = 19$ ) reported having been assaulted by a stranger. The number of perpetrators in different relationship categories, although not explored in depth for this study, varied by relationship category. As might be expected, the majority of participants experiencing CSA by a stranger were only abused by one stranger. Of the participants abused by a relative, 39% were abused by more than one relative, and 35% of participants abused by a cohabitant were abused by more than one cohabitant. Less than 3% ( $n = 4$ ) of participants reported having been sexually assaulted only by a stranger and not also assaulted by an individual who was known to them. Thus, the frequency of the exclusively unknown group was too small to support any analyses.

Institutional review boards (IRB) at Brandeis University and at each of the sites where juveniles were tested approved both the participant selection and administration protocols.

**Table 1.** Frequency of Perpetrators by Number and Relationship Type.

Perpetrators	Frequency	Valid %
None	58	32.96
Any	120	67.04
Total	178	100
	Known	
1	53	45.69
2	31	26.72
≥3	32	27.59
Total	116	65.17
	Unknown	
1	18	94.74
2	1	0.53
≥3	0	0
Total	19	10.67
	Related	
1	42	60.87
2	15	21.74
≥3	12	17.39
Total	69	38.76
	Unrelated	
1	43	51.81
2	20	24.10
≥3	20	24.10
Total	83	46.63
	Cohabitant	
1	39	65.00
2	13	21.67
≥3	8	13.33
Total	60	33.71
	Non-cohabitant	
1	58	59.79
2	15	15.46
≥3	24	24.74
Total	97	54.49

## Procedure

*Selection and administrative procedures.* A two-step process was followed in selecting participants. First, on-site institutional personnel identified and approached potential volunteers either directly or after advertising. Both parental consent and juvenile assent were obtained prior to testing. Second, the research team met with groups of 6 to 15 prospective participants and provided more detail about (a) the nature of the

questions they would be asked, (b) the protection of their confidentiality guaranteed in the study by a Certificate of Confidentiality awarded by the National Institute of Mental Health, and (c) the US\$18 remuneration for participation. Participants were assigned random research identification numbers and neither their names nor their institutional identification numbers were included on any part of the testing protocol. A master list linked participants' research numbers to their names so that supplemental information abstracted from their criminal records could be coupled with their inventory responses. After the information abstraction, the master list was destroyed. When the testing was introduced, the potential future benefits of improved assessment for those who had sexually abused were emphasized, and a strong plea was made for honest responding.

Each participant was administered the most recent version available (Version 4, 5, or 6) of the Multidimensional Assessment of Sex and Aggression (MASA). The MASA is a computerized, contingency-based, retrospective, self-report inventory that assesses multiple domains relevant to the development and course of coercive sexual behavior (see the Multidimensional Inventory of Development, Sex, and Aggression [MIDSA], 2011; [www.midsa.us](http://www.midsa.us)). The MASA is written for a fourth-grade reading level. For individuals who were unable to read at that level, questions were read aloud for them in a separate room by one of the investigators.

*The MASA.* The MASA gathers detailed information on development, social environment, social competence, expressive aggression, juvenile and adult antisocial behavior and aggression, undifferentiated anger, offense planning, and various aspects of sexual behavior (e.g., sexual preoccupation, feelings of inadequacy, paraphilias, deviant sexual arousal). The versions of the MASA used in this study incorporated language written for juveniles and included age-appropriate questions on social competence and sexual attitudes, behavior, cognitions, and fantasies. The scales developed for the MASA, including those used in the present study, have shown adequate to high test-retest reliabilities in samples of juveniles. Moreover, 87% of the 53 scales yielded Cronbach's alphas equal to or greater than .70, 63% of the scales produced alphas equal to or greater than .80, and none of the scales yielded alphas below .60 (Knight & Cerce, 1999; Knight, Prentky, & Cerce, 1994; MIDSA, 2011). Both juvenile and adult samples have shown considerable consistency in their factor structures among scales across MASA domains, and juvenile samples have shown test-retest reliability and internal consistencies comparable with adult samples (Knight, 2004; Knight & Cerce, 1999; MIDSA, 2011). The present study focused on the portions of the MASA that explored sexual abuse history, and the scales that assess emotional dysregulation, callousness/manipulativeness, and sexualization.

## Measures

*Developmental measures of sexual abuse.* The developmental interview section of the MASA used contingency-based questioning to assess sexual abuse victimization history in detail. Sexual abuse was defined as any physical sexual contact with an adult,

older child, or family member. To create these scales, we focused on two dimensions of sexual abuse: the number of perpetrators and the relationship between the perpetrators and the participant.

The MASA initially asks the respondent to report sexual experiences with particular individuals that occurred before the respondent's 18th birthday. Through follow-up questions, it explores the nature and extent of the sexual contact. In a separate section, it identifies all those who lived with the youth until his 18th birthday, and those to whom he was related. Three perpetrator relationship types were identified using the MASA. Two variables reproduce perpetrator relationship categories that have commonly been used in other studies: (a) whether the perpetrator was previously known to the respondent or was a stranger (known/unknown), and (b) kinship by blood, adoption, or step/half familial tie (related/unrelated). A third variable was introduced in this study: (c) cohabitation—the respondents' indication of never having lived with the perpetrator(s) of their sexual assault(s) (non-cohabitant) or having lived with an individual for a minimum of 1, 3, 6, 12, or 24 months (cohabitant). Based on these relationship types, we coded each sexually abusive relationship as unknown (0) or known (1) to the respondent, as unrelated (0) or related (1) to the respondent, and as being perpetrated by an individual who never cohabitated (0) or cohabitated (1) with the respondent for a minimum of 1, 3, or 6 months. For each type of relationship, we summed the instances of sexual contact and created an ordinal 4-point scale (0 = *not abused by any perpetrators of this type*, 1 = *abused by one perpetrator*, 2 = *abused by two perpetrators*, 3 = *abused by three or more perpetrators*).

**Dependent outcome scales.** MASA scales contained items with either five or six response options. The five response-option items ranged from 0 (*definitely false*) to 4 (*definitely true*) and the six response-option from 0 (*never*) to 5 (*very often, >50 times*). The average of the Cronbach's alphas for these scales was .79, ranging from .69 to .90 (see Table 2). All scales were generated from exploratory factor analyses on ASOs and confirmatory analyses on JSO and community control samples (see MIDSA, 2011). Three theoretically cohesive domain clusters—aggression/emotional dysregulation, callousness/manipulativeness, and sexualization—assessed outcomes. The correlations among outcome measures are presented in Table 3. These correlations support the cohesion in emotional dysregulation and sexualization clusters. The callousness/manipulativeness cluster showed less cohesion, and conning/superficial charm tended to correlate with all variables in the other two clusters.

**Aggression/emotional dysregulation.** This cluster captures difficulties controlling emotions, disinhibitory psychopathology, and aggressive behavior.

**Constantly Angry.** This scale consists of eight items that assess instances of anger and failure to control one's temper. Respondents who scored high on this scale reported grouchiness, frequent anger, and temper tantrums. The internal consistency for juveniles was .86. An example of an item on the scale is, "I get grouchy about little things."

**Table 2.** Cronbach's Alphas for Dependent Outcome Scales.

Variable	$\alpha$
Emotional dysregulation	
Juvenile assault	.81
Constantly angry	.86
Physical fighting	.75
Impulsivity	.81
Callousness/manipulativeness	
Lack of perspective taking	.70
Conning and superficial charm	.74
Sexualization	
Sexual compulsivity	.85
Sexual preoccupation	.90
Hypersexuality	.69

**Table 3.** Correlations for Dependent Outcome Measures.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Juvenile assault	1								
2. Constantly angry	.32**	1							
3. Physical fighting	.48**	.59**	1						
4. Impulsivity	.23**	.65**	.38**	1					
5. Lack of perspective taking	.06	.10	.08	.16*	1				
6. Conning and superficial charm	.24**	.56**	.43**	.50**	.21**	1			
7. Sexual compulsivity	.06	.26**	.14	.43**	.24**	.43**	1		
8. Sexual preoccupation	.08	.39**	.14	.53**	.19*	.37**	.70**	1	
9. Hypersexuality	.05	.22**	.11	.34**	.16*	.33**	.73**	.61**	1

\* $p \leq .05$  (two-tailed). \*\* $p \leq .01$  (two-tailed).

*Impulsivity.* The internal consistency for this seven-item scale was .80. Respondents who scored high on this scale reported acting on impulse, losing control, and moodiness. An example of an item on the scale is, “I have acted impulsively or without thinking.”

*Juvenile Fighting and Assaultive Behavior Scale.* This factor scale is made up of five subscales with a total of 26 items measuring instances of fighting, bullying, aggressive, and impulsive acting-out behavior. High scorers had a high incidence of fighting and impulsivity. The internal consistency of this scale for juveniles was .81. An example of an item measuring fighting is, “Before my 18th birthday I was involved in physical fights.”

*Physical Fighting.* The internal consistency for this four-item scale assessing enjoyment and perseverance of assaultive behavior (physical fights) against both males and females was .75. An example of an item on the scale is, "I enjoy getting into physical fights."

*Callousness/manipulativeness.* The two scales in this cluster assess callous manipulation of others and difficulties taking another's perspective.

*Conning and Superficial Charm.* The internal consistency for this six-item scale was .74. Respondents who scored high on this scale admitted to conning others, taking advantage of others, manipulating others by lying, and charming others into doing what one wants. An example of an item on the scale is, "I have conned someone to get what I wanted."

*Lack of Perspective Taking.* This scale consists of six items. Respondents who scored high on this scale reported difficulty seeing another's perspective and considering both sides of an issue. The internal consistency for juveniles was .70. An example of an item on the scale is, "I find it difficult to see things from the 'other guy's' point of view."

*Sexualization.* The scales in this cluster assess various aspects of appetitive and consummatory sexual behavior and sexual fantasy.

*Hypersexuality.* This is the only scale that was created using rational scale construction and not factor analysis. It consists of five items that measure components of sexual drive that Kafka (2010; Kafka & Hennen, 2003) recommended to assess hypersexuality. Respondents who scored high on this scale reported frequent sexual activity and/or the need to have sex frequently. The internal consistency for the juvenile scale was .69. An example of an item on the scale is, "I need to masturbate or have sex every day so that I feel less tense."

*Sexual Compulsivity.* This factor scale consists of nine items. Respondents who scored high on this scale reported being a slave to their sexual urges/being unable to control their sexual urges. The internal consistency for the juvenile scale was .85. An example of an item is, "I have had a very strong urge to peep or secretly watch people having sex."

*Sexual Preoccupation.* This factor scale consists of seven items. Respondents who scored high on this scale reported that they think, daydream, and dream about sex frequently. The internal consistency for the juvenile and scale was .90. An example of an item on the scale is, "There have been times when I thought about sex all of the time."

## Analyses

The unrelated/related and non-cohabitant/cohabitant perpetrator relationship categories served as independent variables for MANOVAs. To reduce familywise error, univariate ANOVAs were only calculated for measures with significant (at least  $p < .05$ , one-tailed) overall MANOVAs. One-tailed significance was justified because we had a priori hypotheses that differences would be found in these domains for cohabiting caregivers. Familywise error was also reduced through the use of data aggregation (i.e., use of factor scores). For all variables in the not related/related and the

**Table 4.** Multivariate Analysis of Variance on the Categories and Domains.

Category	Domain	Overall			First parameter		
		$\lambda$	$F$	$p$	$\lambda$	$F$	$p$
Related	Emotional dysregulation	.94	1.28	.251	.96	1.68	.158
	Callousness/manipulativeness	.97	1.55	.188	.99	0.90	.407
	Sexualization	.97	0.90	.493	.98	1.16	.328
Cohabitant	Emotional dysregulation	.90	2.35	.018*	.95	2.16	.076†
	Callousness/manipulativeness	.95	2.34	.055†	.95	4.36	.014**
	Sexualization	.93	2.02	.062†	.95	2.99	.032*

Note. The cohabitant category has a 3-month minimum of cohabitation.

\* $p \leq .05$  (two-tailed). \*\* $p \leq .01$  (two-tailed). † $p < .05$  (one-tailed).

cohabitant/non-cohabitant categories with one exception, Levene’s tests of homogeneity of variance showed that the variances were equal across groups.

## Results

No significant MANOVA results emerged for those abused by a familial perpetrator (see Table 4). For the cohabitation category, MANOVAs were calculated for any cohabitant who lived with a JSO for any amount of time and for 3-, 6-, 12-, and 24-month minimums. There were no significant differences across minimum cohabitation duration. Based on these findings, we will present the results for a 3-month minimum of cohabitation. For those measures with significant MANOVAs ( $p \leq .05$ , one-tailed), follow-up univariate ANOVAs and post hoc Student–Newman–Keuls analyses were calculated (see Table 5).

### Cohabitant Multivariate Analyses

For the 3-month minimum cohabitation, MANOVAs were significant (overall  $p$  value at least .05, one-tailed) for the emotional dysregulation, callousness/manipulativeness, and sexualization domains (see Table 4). The cluster of scales in the emotional dysregulation domain (Constantly Angry, Impulsivity, Juvenile Fighting and Assaultive Behavior, and Physical Fighting) differentiated significantly among groups on the overall MANOVA, Wilks’  $\lambda = .90, F(8, 338) = 2.35, p = .02$  (two-tailed). In the callousness/manipulativeness domain the two scales (Conning and Superficial Charm and Lacking Perspective Taking/Planning) approached two-tailed significance and reached one-tailed significance on the overall MANOVA, Wilks’  $\lambda = .95, F(4, 346) = 2.34, p = .03$  (one-tailed). Finally, the sexualization cluster (Sexual compulsivity, Sexual preoccupation, and Hypersexuality) approached two-tailed and reached one-tailed significance on the overall MANOVA, Wilks’  $\lambda = .93, F(6, 340) = 2.02, p = .03$  (one-tailed). For both the callousness/manipulativeness and sexualization domains, although the overall only reached one-tailed significance, the

**Table 5.** Follow-Up Univariate Analyses for Cohabitant/Non-Cohabitant and No CSA Groupings.

Variable	No CSA			CSA: Non-cohabitant			CSA: Cohabitant			F
	M	SD	n	M	SD	n	M	SD	n	
Emotional dysregulation										
Juvenile assault	1.25	0.64	57	1.25	0.64	72	1.50	0.78	46	2.35
Constantly angry	2.74	1.15	57	2.95	0.99	72	3.15	0.97	46	1.95
Physical fighting	2.06 <sub>a</sub>	1.16	57	1.83 <sub>a</sub>	1.01	72	2.45 <sub>b</sub>	1.02	46	4.97**
Impulsivity	2.25 <sub>a</sub>	1.28	57	2.58 <sub>ab</sub>	1.15	72	2.87 <sub>b</sub>	1.07	46	3.65*
Calmness/manipulativeness										
Lack of perspective taking	1.94	0.91	58	1.95	0.86	73	1.87	1.01	46	0.12
Conning and superficial charm	2.19 <sub>a</sub>	0.89	58	2.33 <sub>a</sub>	0.82	73	2.67 <sub>b</sub>	0.91	46	4.14**
Sexualization										
Sexual compulsivity	1.52 <sub>a</sub>	0.97	57	1.62 <sub>ab</sub>	1.02	72	1.96 <sub>b</sub>	0.91	46	2.78†
Sexual preoccupation	2.79 <sub>a</sub>	1.25	57	3.03 <sub>ab</sub>	1.11	72	3.36 <sub>b</sub>	0.95	46	3.22*
Hypersexuality	1.83 <sub>a</sub>	0.83	57	1.87 <sub>a</sub>	0.94	72	2.35 <sub>b</sub>	0.94	46	5.19**

Note. No CSA refers to participants who reported no history of sexual abuse. CSA: Non-cohabitant refers to participants who reported histories of sexual abuse by abusers who never cohabited with them; CSA: Cohabitant refers to those who did cohabitate with their abusers. In this table, means that share common subscripts across rows are not significantly different, whereas means with different subscripts are significantly different from one another at the  $p < .05$  level. CSA = child sexual abuse.

\* $p \leq .05$  (two-tailed). \*\* $p \leq .01$  (two-tailed). † $p < .05$  (one-tailed).

effect sizes of the first parameter of both analyses reached two-tailed significance ( $p = .01$  and  $.03$ , respectively). The first parameter captures the primary linear composite that differentiates among the three groups in the MANOVA (Tabachnick & Fidell, 2007). Based on these results, we performed univariate follow-up analyses on all three domains.

### Cohabitant Univariate Analyses

Table 5 presents both the univariate analyses of the dependent measures in each of the three significant domains in the cohabitant analyses and the post hoc Student–Newman–Keuls multiple range tests that were done for each significant dependent variable ( $p < .05$ , one-tailed). Groups that do not share the same subscript were significantly different ( $p < .05$ , two-tailed).

For the emotional dysregulation domain, both Physical Fighting,  $F(2,174) = 4.97$ ,  $p < .01$ , and Impulsivity,  $F(2, 173) = 3.65$ ,  $p < .03$ , were significant. JSOs who experienced CSA perpetrated by a cohabitant scored significantly higher on Physical Fighting than both JSOs who experienced no CSA and JSOs who experienced CSA by non-cohabitants. JSOs who experienced CSA perpetrated by a cohabitant scored

significantly higher on Impulsivity than JSOs who had experienced no CSA, but there was no difference between JSOs who experienced CSA by a cohabitant and CSA by a non-cohabitant. Also, there was no significant difference in Impulsivity between JSOs who experienced CSA by a non-cohabitant and JSOs who did not experience CSA. Neither the Juvenile Assault Scale nor the Constantly Angry Scale yielded significant univariate results.

For the callousness/manipulativeness domain, the ANOVA for Conning and Superficial Charm was significant,  $F(2, 174) = 4.14, p < .02$ . JSOs who experienced CSA perpetrated by a cohabitant scored significantly higher on the Conning and Superficial Charm Scale than both those JSOs who experienced CSA by a non-cohabitant and those JSOs who had no experiences of CSA. The Lack of Perspective Taking Scale did not produce significant univariate results.

For the sexualization domain, Sexual compulsivity approached significant univariate results,  $F(2, 173) = 2.78, p < .05$  (one-tailed), and Sexual preoccupation yielded significant univariate results,  $F(2, 172) = 3.2, p = .04$ . JSOs who experienced CSA perpetrated by a cohabitant scored significantly higher on both Sexual compulsivity and Sexual preoccupation than JSOs who had not experienced CSA. Neither JSOs who experienced CSA by a cohabitant nor JSOs who did not experience CSA were, however, significantly different from those who experienced CSA by a non-cohabitant. Finally, Hypersexuality was significant,  $F(2, 174) = 5.19, p < .01$ , and JSOs whom a cohabitant had abused scored significantly higher on this scale than both those JSOs who had no experience of CSA and those whom a non-cohabitant had abused.

## Discussion

In this study, we explored how two operationalizations of closeness in relationships—kinship and cohabitation—covaried with subsequent sexual behavior and fantasies and with scales assessing various components of psychopathic behavior and emotional dysregulation. The data supported our hypothesis that of the two proposed operationalizations of closeness we were able to analyze, abuse by a cohabitant was the best predictor of scales measuring subsequent sexualization, callousness/manipulativeness, and impulsivity.

### *Emotional Dysregulation*

The emotional dysregulation domain can be split into two smaller theoretical categories: anger (pervasive/constant anger) and impulsivity (fighting, juvenile assault, and impulsivity). We found that post hoc analyses demonstrated higher scores on the juvenile assault and impulsivity scales for juveniles abused by someone with whom they had a close relationship as compared with juveniles who were never sexually abused or were abused by individuals with whom they had no relationship. These results indicate that CSA, when perpetrated by an abuser in a close relationship, is linked to subsequent higher impulsivity or disinhibition.

*Impulsivity.* Impulsivity, which is a frequently found consequence of CSA (e.g., Kendall-Tackett, 2002), is also a common sequela of such abuse as indicated by the covariation of CSA and increases in frequency of eating disorders, substance abuse, unprotected sex, and other either self-injurious or impulse-control behaviors (Cohen et al., 2010). Impulsivity is also a frequent outcome of a combination of emotional, physical, and sexual child abuse (e.g., Braquehais, Oquendo, Baca-García, & Sher, 2010). In addition, it is a core trait in etiological models for both juveniles who offend against peers (Knight & Sims-Knight, 2004) and against children (Daverson & Knight, 2007) and adults who sexually offend (Knight & Sims-Knight, 2011). Correlational analysis (see Table 3) also indicated a relation between impulsivity and the other outcomes present within this study.

Although measures of impulsivity consistently emerge as important covariates of sexual offending in youths (Seto & Lalumière, 2006), the precise nature of the processes underlying the behaviors remains unclear. Impulsivity and other measures of disinhibitory psychopathology and externalization are consistently found to predict general criminal recidivism in JSOs, but these constructs have been inconsistent predictors of sexual recidivism (Caldwell, 2007, 2010; Carpentier & Proulx, 2011; Driemeyer et al., 2011; Worling & Långström, 2006). So, although impulsivity increases with CSA committed by a cohabitant, its direct consequences for sexual offending and re-offending require further investigation.

### *Callousness/Manipulativeness*

Callousness/manipulativeness (also known as callous/unemotionality or CU traits) has been found to be a core component of etiological models of sexual offending in youths. CU traits center on disregard for the needs and feelings of others, using others for one's personal ends, callousness, and remorselessness. CU traits have been found to be especially important for designating JSOs with antisocial behaviors who (a) exhibit the most severe and violent behaviors, (b) have greater numbers of victims, (c) show more offense planning, and (d) whose behavioral stability over time (Caputo, Frick, & Brodsky, 1999; Frick & White, 2008; Lawing, Frick, & Cruise, 2010). In addition, such traits in youths with conduct problems may signal a deficit in conscience and affect development, reactive and instrumental aggression, and fearlessness, as well as low distress over punishment and consequences (Frick & White, 2008). Although these traits tend to be relatively stable between late childhood and adolescence (Caputo et al., 1999; Frick, Kimonis, Dandreaux, & Ferrell, 2003; Frick & White, 2008; Muñoz & Frick, 2007), there is preliminary evidence that supports malleability of CU traits especially in youths (Frick et al., 2003; Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007).

### *Sexualization*

The final domain, sexualization, has been linked to CSA in multiple populations across genders, risk levels, and ages (Fergusson et al., 1997; Paolucci et al., 2001; Senn et al.,

2008). Although sexualized behavior can refer to any number of emotionally or physically risky sexual acts, here sexualization specifically refers to the internal processes of sexual compulsivity and sexual fantasizing, as well as the frequency of sexual behaviors. With nearly as many constructs of sexual behaviors/sexualization as theories or tools to measure it, it is sometimes difficult to compare results across studies. Further exploration of the components of sexualization should allow for the development of more useful risk-assessment instruments, increase researchers' ability to look across populations, provide a better understanding of the etiology and outcomes of hypersexuality, and determine more effective treatment options (Knight et al., 2009). Among JSOs, sexualization is a potential risk factor for persistent sexual offending in youths, and our findings indicate that this complex set of cognitions and behaviors may be differentially influenced by perpetrator relatedness in CSA (Driemeyer et al., 2011; Kafka & Hennen, 2003).

The results presented above corroborated our hypothesis that in studying the outcomes of sexual abuse, it is essential to differentiate levels of relatedness between victim and perpetrator. The theoretical and practical implications of this finding as a predictor of continuing difficulties for JSOs with a history of CSA are discussed below.

As noted earlier, there are numerous compelling reasons why social learning could play a potent role within an attachment relationship. Burton (2003) posited that in addition to learning the specific sexual behaviors to which they were exposed, abused youths may also learn that assaults can generate both power and pleasure. Thus, CSA perpetrated within a relationship that serves as a model for future relationships would be more likely to encourage social learning of sexually assaultive acts than abuse perpetrated outside of an attached relationship.

To address the learning model in the current study, we fully assessed two operational definitions of closeness. These definitions constituted a conceptual compromise between an ideal theoretical conceptualization of attachment and the limitations of our assessment tool and sample. We hypothesized that the cohabitation operationalization best approximated the potential for low and high attachment. Unlike biological relatedness, cohabitation was also the most likely measure to capture an ongoing and reinforcing modeling of behaviors. The data analyses, which only yielded significant results for the cohabitation measure, supported our hypotheses. Although this study was retrospective and did not explore predictive validity prospectively, our results nonetheless suggest that for JSOs, relationship type variables may be viable candidates for future study predicting initial sexual offending, as well as offending that continues into adulthood.

## Limitations and Future Directions

Several factors limit the generalizations that can be drawn from this study—the retrospective, self-report nature of the recalled abuse, the selectivity of the sample, the absence of any comparison non-offending groups, and the lack of neuropsychological or physiological measures.

Although self-report data are vulnerable to response biases and depend on the accuracy of respondents' memories, in the present study participants were ensured confidentiality, and their low social desirability scales indicated that their response biases were minimal. Moreover, child reports of early abuse and symptoms of trauma and depression may in some instances have superior predictive power when compared with caseworkers' and parents' reports (Eckenrode, Izzo, & Smith, 2007). They provide supplements to parental reports (Skilling, Doiron, & Seto, 2011). Thus, the difficulties of self-report may have been minimized in this study.

Although retrospective reporting is vulnerable to many potential distortions, including memory failures and biased reporting of stressful experiences, especially if viewed through the lens of later adjustment problems (Widom, Raphael, & DuMont, 2004), it still remains the optimal way to gather data about some types of abuse (Kendall-Tackett & Becker-Blease, 2004). Much of sexual abuse goes undetected as it occurs, and if it were known prospectively, ethical requirements for intervention would affect prediction. Also, because the computerized inventory asked about particular events and not about attitudes or feelings, it was likely that participants were more accurate in their recall and reporting (Henry, Moffitt, Caspi, Langley, & Silva, 1994). Nonetheless, its limitations must be acknowledged when interpreting the data.

In the current study, our measures of the relationships between these JSOs and their abusers captured only limited aspects of the attachment relationship. Determining the presence of an attachment, attachment style, and the importance of individual relationships is an essential next step. More detailed research on the nature of CSA relationships is critical to our understanding of the effects of such relationships.

Other factors in a cohabitant perpetrator–victim relationship may work in concert to affect outcome such as providing the perpetrator with greater access to the child victim leading to more instances of abuse over time, and potentially greater escalation of abuse than non-cohabitation. CSA origination in a child's own home may leave the victim/survivor with greater feelings of extreme helplessness and may result in more extended periods of stress than CSA perpetrated by someone outside the home. These questions and potential confounding of variables should also be examined in future studies.

Because the data for this study were collected exclusively from male JSOs residing in inpatient sexual-offender treatment facilities, a highly specialized sample, one cannot generalize these results to female JSOs, all adolescents, all survivors of CSA, or ASOs. Juveniles in this sample had been convicted of, or were in treatment for, unacceptable sexual behavior and were selected because of this difficulty. Both dispositional and developmental factors that covary with this selection process might have affected the results. In addition, parental (or guardian) consent was required for all participants under the age of 18 at the time of testing. It is possible that despite anonymity and confidentiality assurances, some parents who perpetrated abuse against their children would not provide consent, leading to an underrepresentation of the incidence of parental sexual abuse. Moreover, the youths were viewing their abusive experiences through the lens of their own abusing behavior. It is not clear from this

study whether a relation between abuse relationship type and outcome would be found in community controls or in ASO populations. These are essential future studies.

In the present study, we found CU traits to be highest within the CSA cohabitant group. In previous studies, others have found that CU traits have a strong genetic component (Larson, Andershed, & Lichtenstein, 2006; Pardini, Lochman, & Powell, 2007; Taylor, Loney, Bobadilla, Iacono, & McGue, 2003; Viding, 2004; Viding, Blair, Moffitt, & Plomin, 2005; Viding, Fontaine, Oliver, & Plomin, 2009). It is possible that a genetic predisposition to CU traits may be triggered or encouraged by the presence of a toxic stressor, such as a cohabitant sexual abuser. The interaction of stressors and specific predispositions must be explored (Beaver, 2008).

Despite these limitations, our study yielded important results about the nature of the relationship between a perpetrator and a JSO and about the factors important to perpetration. This study also introduced new data about the ways that researchers characterize relationships, illustrating the necessity for greater specificity in assessment tools in the future and the importance of revisiting assumptions based on previous definitions of CSA relationships. In addition to refining the relationship definitions and including assessments of genetic vulnerability, future research should investigate the impact of closeness to the perpetrator on outcomes in young non-sexual offenders, community samples, and adult populations.

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