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ORIGINAL ARTICLE

# The Effect of Childhood Sexual Abuse on Psychosexual Functioning During Adulthood

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**Abstract** The study examined whether and how characteristics of childhood sexual abuse and disclosure influenced three dimensions of psychosexual functioning—emotional, behavioral and evaluative—during adulthood. The sample included 165 adults who were sexually abused as children. The General Estimating Equation was used to test the relationship among the predictors, moderators and five binary outcomes: fear of sex and guilt during sex (emotional dimension), problems with touch and problems with sexual arousal (behavioral), and sexual satisfaction (evaluative). Respondents who were older when they were first abused, injured, had more than one abuser, said the abuse was incest, and told someone about the abuse were more likely to experience problems in at least one area of psychosexual functioning. Older children who told were more likely than younger children who told to fear sex and have problems with touch during adulthood. Researchers and practitioners should consider examining multiple dimensions of psychosexual functioning and potential moderators, such as response to disclosure.

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Over the past few decades, a substantial body of research has documented the pernicious long-term effects of child sexual abuse (CSA; see reviews by Hunter 2006; Polusny and Follette 1995; Putnam 2003; Spataro et al. 2001). Some negative effects associated with CSA include mental health problems, substance abuse, and suicidal thoughts and attempts. Researchers have also established a relationship between CSA and sexual maladjustment during childhood (Beitchman et al. 1991; Kendall-Tackett et al. 1993; Knutson 1995), and during adolescence and adulthood, including preoccupation with sex (Noll, Trickett, & Putnam 2003), sexual risk-taking (Brown et al. 2000; Holmes 2008; Sikkema et al. 2009; LeMieux and Byers 2008), and compulsive sexual behavior (McClellan et al. 1996).

In addition to these sexual behaviors, researchers have found a relationship between CSA and psychiatric disorders involving sexual functioning (e.g., arousal, orgasm, pain; Fleming et al. 1999; Reissing et al. 2003; Sarwer and Durlak 1996). For example, Najman et al. (2005) conducted a large population-based study and found a relationship between CSA and outcomes such as lack of desire, problems with arousal or orgasm, and pain. Researchers have also found that CSA is related to lower sexual satisfaction during adulthood (Katz and Tirone 2008; Rellini and Meston 2007). In one of the few studies that used a random probability sample, Laumann et al. (1994) investigated sexual practices in the U.S. and found that women who reported a history of CSA were more likely to have sexual problems in the past year than women who did not report CSA. Of the women who reported a history of CSA, 40% of the women lacked interest in sex, 32% reported that sex was not pleasurable, and 59% reported that emotional problems interfered with sex (Laumann et al.

1994). Not all researchers, however, have found a relationship between CSA and sexual dysfunction in adulthood (e.g., desire, arousal, and orgasm)(Bartoi and Kinder 1998; Meston et al. 2006). Yet, the empirical evidence to date suggests that adults who were sexually abused in childhood are at higher risk for sexual dysfunction than adults who were not sexually abused.

Despite the relatively large number of studies comparing adults who were and were not sexually abused, very little research on sexual functioning has examined heterogeneity *among* adults who were sexually abused as children. The purpose of this study is to understand variability in psychosexual functioning among adults who were sexually abused as children. First, we determine whether characteristics of the sexual abuse (e.g., age at first abuse, severity) and disclosure (e.g., telling someone at the time of the abuse) are related to multiple dimensions of psychosexual functioning in adulthood. Second, we examine whether disclosure moderates the effect of, for example, more severe sexual abuse on each dimension of psychosexual functioning. Table 1 summarizes the factors included in our conceptual framework.

## Literature

One of the major limitations of existing research on the sexual functioning of adults who were sexually abused during childhood is the inconsistent conceptualization and measurement of the dependent variable. The literature includes widely varying definitions of sexual (dys)function (Leonard and Follette 2002) and each dimension of functioning. Many studies focused narrowly on the behavioral or physiological dimension of sexual functioning (e.g., arousal, orgasm) and ignored underlying emotional factors (Davis and Petretic-Jackson 2000). Negative emotions, such as anxiety, fear and disgust during sex, are more common among adults with CSA histories than among adults without CSA histories (Meston et al. 2006), and may impact their physiological response to sex. Similarly, emotions such as guilt, sadness, and shame after sex are also common among adults with CSA histories (Westerlund 1992) and may reduce their sexual satisfaction. Moreover, a large number of studies have examined the evaluative dimension of sexual functioning (e.g., satisfaction) without examining the behavioral or emotional dimensions of sexual functioning (Davis and Petretic-Jackson 2000).

Despite recognition that sexual functioning is multifaceted with emotional, behavioral and evaluative components (Leonard and Follette 2002; Loeb et al. 2002; Noll et al. 2003), we found only one study that included all three dimensions of psychosexual functioning. In a large representative sample, Najman et al. (2005) reported that CSA was associated with a higher number of sexual dysfunction symptoms for both men and women including anxiety about sexual performance, erection and lubrication problems, and not finding sex pleasurable. Additionally, women who experienced penetrative CSA were more likely to report more sexual dysfunction symptoms than women who did not experience penetrative CSA. Interestingly, for both men and women, CSA was not associated with the level of physical or emotional satisfaction with sex.

Although the three dimensions of psychosexual functioning appear to be related conceptually, they are not perfectly correlated in either research or practice. For

**Table 1** Conceptual framework

| Predictors | Predictors and moderators | Dimensions of psychosexual functioning | | |
|---|---|---|---|---|
| | | Emotional | Behavioral | Evaluative |
| Characteristics of abuse: | Disclosure | Was afraid of sex | Had problems with touch | Was dissatisfied with sex |
| Child was older at first abuse | At the time, child told someone | Felt guilty during sex | Had problems with arousal | |
| Sexual abuse was more severe: | They told someone else without child's permission | | | |
| • Was more frequent | Child discussed with someone within 1 year of the abuse | | | |
| • Was over a longer period of time (Duration) | | | | |
| • Was assaulted by sexual abuser | | | | |
| • Was injured by sexual abuser | | | | |
| • Was more than one abuser | | | | |
| Abuse was incest | | | | |

example, in an early study, Jehu (1988) found that many adult women with histories of CSA seeking treatment for sexual dysfunction report sexual dissatisfaction despite normal levels of sexual motivation and arousal. Similarly, some adults may not fear sex or feel guilt during it, but they may experience problems with arousal, touch or sexual satisfaction. Other studies on adults with histories of CSA found that sexual functioning and sexual satisfaction were not related (Leonard et al. 2008; Rellini and Meston 2007). Thus, it is important to examine which factors influence each dimension of psychosexual functioning.

To accomplish this, we include three dimensions of psychosexual functioning in our conceptual framework: emotional, behavioral, and evaluative. The emotional dimension includes fear of sex and guilt during sex. The behavioral dimension includes problems with being touched sexually and with arousal. Finally, we include an evaluative dimension: satisfaction with sex. By identifying which factors are related to each dimension of psychosexual functioning, while controlling statistically for their interrelatedness, this study may inform clinical assessment and treatment.

To select factors that might explain variability in psychosexual functioning among adults who were sexually abused, we relied, in part, on Finkelhor and Browne's (1985) traumagenic dynamics model. They proposed that a combination of four dynamics—traumatic sexualization, stigmatization, betrayal, and powerlessness—can help explain the negative effects of CSA. Finkelhor and Browne (1985) defined traumatic sexualization as "…a process in which a child's sexuality (including both sexual feelings and sexual attitudes) is shaped in a developmentally inappropriate and interpersonally dysfunctional fashion as a result of sexual abuse" (p. 633). Traumatic sexualization, in particular, may affect sexual functioning during adulthood, and the severity of the CSA (e.g., duration, frequency, coercion) may increase the level of traumatic sexualization (Finkelhor and Browne 1985).

Consistent with Finkelhor and Browne's (1985) model, research has shown that the severity of sexual abuse was related to problems in sexual functioning. Researchers have found a relationship between sexual functioning and the duration and frequency of sexual abuse (Kinzl et al. 1995) and between sexual functioning and the number of sexual abusers (Farley and Keaney 1997). Browning and Laumann (1997), too, found that severity (e.g., type of sexual contact, frequency, number of abusers) was related to the emotional (e.g., stress during sex) and behavioral (e.g., poor lubrication, pain) dimensions of sexual dysfunction. Because more severe forms of sexual abuse (e.g., longer duration, higher frequency, more than one abuser, injury) may increase the degree of traumatic sexualization and sense of powerlessness, we expect that adults who report severe sexual abuse will be more likely to experience problems in all areas of psychosexual functioning than adults who do not report severe sexual abuse.

Finkelhor and Browne (1985) suggest that age at the time of the abuse may affect the level of traumatic sexualization. Due to their stage of development, younger children may be less aware of the sexual implications of the CSA than older children. As a result, children who are older at the time of the abuse may be more sexually traumatized, feel more stigmatized and betrayed, and experience more intense feelings of fear and guilt than children who are younger. Accordingly, we expect adults who were older at the time that the sexual abuse began will have poorer psychosexual functioning than adults who were younger at the time the sexual abuse began.

In addition to abuse severity and age at the time of first abuse, the child's relationship to the abuser may be related to sexual functioning. Because children expect family members to support and protect them, children who are abused by family members, especially parents, may experience higher levels of traumatic sexualization and betrayal than children who are sexually abused by non-family members. The heightened sense of betrayal may make it more difficult for children to form healthy intimate relationships during adulthood, contributing to poorer psychosexual functioning. Based on the traumagenic dynamics model (Finkelhor and Browne 1985), and the potential importance of the child's relationship to the abuser on the child's sense of betrayal, we expect incest will increase the likelihood of psychosexual problems.

Acknowledging the potential impact of post-abuse factors, Finkelhor and Browne (1985) write that disclosure of CSA and response to disclosure are key factors that affect trauma among abused children. We did not find any studies that examined disclosure as either a predictor or moderator of psychosexual functioning. However, children who tell someone about their abuse may be harmed by others' reactions (e.g., not believed, blamed, labeled as bad), resulting in greater shame and feelings of guilt (Finkelhor and Browne 1985). Furthermore, if the confidant tells someone else without the child's permission, this response may further increase the child's sense of shame, powerlessness and betrayal. Increased levels of shame, powerlessness and betrayal during childhood may create problems with trusting an intimate partner during adulthood and psychosexual functioning, including feeling guilty during sex.

Although telling alone may be problematic, *discussing* the abuse with someone shortly after the abuse may decrease the likelihood of psychosexual problems in adulthood. For example, O'Leary et al. (2010) found that adults who discussed the abuse within one year had better mental health than adults who waited longer to discuss the

abuse or who never discussed the abuse. Helping children understand their abuse through discussion (e.g., placing responsibility on the abuser) may reduce feelings of shame and powerlessness, thereby reducing the impact of CSA on sexual functioning during adulthood. Therefore, we expect that discussing the abuse within a relatively short period of time will reduce the likelihood of problems in psychosexual functioning.

In addition to examining the direct effect of disclosure, we will examine whether disclosure moderates the relationship between characteristics of CSA (severity, age at first abuse, relationship to abuser) and each dimension of psychosexual functioning. For example, since telling alone may increase shame and being older may increase shame, we expect that among respondents who told, adults who were older will be more likely to have problems in psychosexual functioning than adults who were younger. By examining different dimensions of psychosexual functioning and the potential moderating effect of disclosure, we hope to generate useful information that will prevent problems in psychosexual functioning during adulthood and improve intervention efforts.

## Methods

### Design and Sample

This secondary analysis was based on data collected through semi-structured telephone interviews conducted by the Centres Against Sexual Assault in Victoria, Australia. Survey respondents were recruited from the community through advertisements placed in newspapers; posted at community organizations, including human service agencies, schools, restaurants and shops; and on community radio. Two hundred and seventy-six (276) adults who were sexually abused during childhood responded to the ads. Of these respondents, 96 adults reported they had been sexually assaulted as adults. For some interview questions, we could not be certain whether they were responding to their CSA or their adult sexual assault. Therefore, we excluded respondents who were both sexually abused as children and as adults. Moreover, seven of the respondents reported "sexual problems" but did not specify the nature of those problems. Because we were interested in specific aspects of psychosexual functioning, such as behavioral responses, we excluded these adults from the sample.

*Sample Characteristics* The final sample consisted of 165 adults, ages 20 and older, who were sexually abused as children only. The majority of respondents were female (80.6%; male=19.4%), were not employed outside the home (63%), and completed high school or fewer years of education (61.2%). The sample included respondents in their 20s (22.2%), 30s (33.9), 40s (23.6), and 50s or older (20.0). Most of the respondents reported that they live in metropolitan Melbourne or the Regional Centre; 47.9% reported that they live in rural Victoria. Age, gender, employment or rural/urban residence were not related to the dependent variables.

### Measures

This study received human subject approval by the Flinders University of South Australia Human Research Ethics Committee and by the local community organizations coordinating the survey. The respondents were interviewed over the telephone by trained counselors and volunteers.

*Psychosexual Functioning* The respondents were asked, yes or no, whether the sexual abuse during childhood affected three dimensions of their current sexual functioning. Two variables were used to measure the *emotional dimension* of sexual functioning. The respondents were asked whether the sexual abuse resulted in being afraid of sex and in feeling guilty during sex. We examined two *behavioral dimensions* of sexual functioning: whether the sexual abuse resulted in having problems with being touched and in being unable to be sexually aroused. For the *evaluative dimension,* the respondents were asked whether the sexual abuse resulted in being dissatisfied with sex.

*Characteristics of the Sexual Abuse* To measure *age at first abuse*, the respondents were asked how old they were when the abuse first occurred. To measure *frequency*, the respondents were asked whether the abuse occurred more than once (1; once=0). *Duration* was calculated by subtracting age at last incident from age at first incident and was recoded into 5 years or less and more than 5 years. In addition, we asked respondents whether they were physically *assaulted* by the sex abuser (yes=1, no=0) and whether they were *injured* during the sexual abuse. The respondents reported four types of injuries: to the skin (abrasions, scratches, or bruises); bones; muscles; and internal or external genitals, or rectum. If respondents reported any injury, they received a score of one (no=0). If they were sexually abused by *more than one abuser*, they received a score of one (one abuser=0). Finally, if the respondents knew their abuser or abusers, then they were asked about their relationship (e.g., parent, step-parent, sibling, neighbor) and whether they considered their abuse to be *incest* (1; 0=not incest).

*Disclosure* The respondents were asked whether they told anyone about the abuse at the time it occurred. If the

respondents said they, *at the time, told someone* about the sexual abuse, then they received a score of one (0=did not tell at time). The respondents were also asked whether they ever discussed their abusive experience with anyone. If the respondent talked to someone about their experience (not just told someone it occurred), then they were asked how long it was before they discussed the abuse. Their responses ranged from immediately to more than 50 years. Only 10 of the respondents discussed the abuse within 1 week of the abuse; for most of the respondents, it was more than 10 years before they discussed it. Because the distribution was skewed, we recoded how long it took to discuss the abuse into two categories: *Discussed the abuse within 1 year*=1 and more than 1 year=0. By using a 1 year interval, we also know the respondents were still children (under the age of 18) when they discussed the abuse. Finally, if they told someone at the time of the abuse, then they were asked whether that person *told someone else without their permission* (1; no=0).

### Data Analysis

The data analyses proceeded in three steps. First, we tested the bivariate relationship between each dimension of psychosexual functioning and two control variables (gender, education), the predictors (age at first abuse, frequency of abuse, duration of abuse, was physically assaulted, was injured, was more than one sexual abuser and was incest) and the hypothesized moderators (told, confidant told, discussed). Second, we examined simultaneously the main effect of the control variables, predictors and the moderators on the five binary outcomes, using an extension of the generalized linear model called General Estimating Equation (GEE). GEE is an estimation procedure that produces more efficient unbiased estimates by addressing the correlations among multivariate binary dependent variables. In this study, the five binary outcomes were all correlated (Two-sided *Kappa*=.25–44; $p<.001$). Modeling these data without adjusting for their interrelationship may result in an over estimation of standard errors and a decrease in power. GEE can accommodate these non-normal, correlated dependent variables. A logit link function and an unspecified correlation structure between the five dependent variables were used. Finally, we tested whether the one significant moderator, telling, moderated the relationship between the significant predictors and the five dependent variables.

## Results

Table 2 includes the bivariate relationships between each indicator of psychosexual functioning and the control variables, predictors and moderators. Control variables, predictors and moderators that were related to at least one of the dependent variables were entered into the GEE. The variables that were related ($p<.05$) to at least one of the five binary outcomes in the GEE are reported in Table 3.

*Emotional Dimension* Controlling for other variables in the model, the respondents who were older at the time the abuse first occurred were more likely to experience problems related to the emotional dimension of sexual functioning than the respondents who were younger (see Table 3). The odds ratio of being afraid of sex was about four times as large for adults who were older when the abuse began as they were for adults who were younger when the abuse began. The odds ratio of feeling guilty during sex was two and one-half times as large for adults who were older as they were for adults who were younger when the abuse began. Being injured during the sexual abuse also appeared to be related to fear of sex. The odds ratio of being afraid of sex was 3.66 times as large for adults who were injured by the abuser as they were for adults who were not injured. If the respondent reported that he or she had been sexually abused by more than abuser, the respondent was 3.62 times more likely to feel guilty during sex than respondents who reported being abused by one abuser.

Telling had a negative effect on feelings of guilt. The odds ratio of feeling guilty during sex was almost two and one-half times larger for respondents who told than for respondents who did not tell someone about the abuse when it occurred. Telling also moderated the relationship between age at first abuse and fear of sex (see Table 3). Among respondents who told someone about the abuse, the odds ratio of being afraid of sex was about 14 times larger for adults who were older as it was for adults who were younger when the abuse first began. Among respondents who did not tell, the odds ratio of being afraid of sex was 2.4 times larger for adults who were older when the abuse first occurred as it was for adults who were younger.

*Behavioral Dimension* Two indicators of abuse severity—being injured during the sexual abuse and having more than one abuser—were both related to the behavioral dimension of psychosexual functioning. The odds ratio of having problems with touch was 2.25 times as large for adults reporting they were injured by the abuser as they were for adults who were not injured. The odds ratio of having problems with arousal was 2.17 times as large for adults reporting they were injured by the abuser as they were for adults who were not injured. If the respondent reported he or she was abused by more than one abuser, the respondent was 6.16 times more likely to report problems with touch and 3.47 times more likely to report problems with arousal than respondent who reported being abused by one abuser.

**Table 2** Bivariate relationships between predictors, moderators and psychosexual functioning (%)

| | Was afraid of sex | Felt guilty during Sex | Had problems with touch | Had problems with arousal | Was dissatisfied with sex |
|---|---|---|---|---|---|
| Gender | | | | | |
| Female | 48.1 | 32.3 | 55.6 | 37.6* | 34.6 |
| Male | 37.5 | 31.3 | 43.8 | 21.9 | 40.6 |
| Education | | | | | |
| High school or less | 40.6** | 34.7 | 52.5 | 37.6 | 33.7 |
| More than high school | 54.6 | 28.1 | 54.7 | 29.7 | 39.1 |
| Age at first abuse | | | | | |
| Was younger (Five or younger) | 29.8*** | 23.4* | 53.2 | 29.8 | 23.4** |
| Was older (Six or older) | 52.5 | 35.6 | 53.4 | 36.4 | 40.7 |
| Frequency of abuse | | | | | |
| Occurred once | 52.6 | 36.8 | 39.5** | 31.6 | 28.9 |
| Occurred more than once | 44.1 | 30.8 | 57.5 | 35.4 | 37.8 |
| Duration of Abuse | | | | | |
| Lasted 5 years or less | 44.6 | 34.8 | 51.1 | 31.5 | 34.8 |
| Lasted more than 5 years | 47.1 | 28.6 | 54.3 | 38.6 | 34.5 |
| Sexual abuser physically assaulted child | | | | | |
| No | 45.6 | 33.8 | 50.0** | 33.1 | 36.0 |
| Yes | 48.3 | 24.1 | 69.0 | 41.4 | 34.5 |
| Sexual abuser injured child | | | | | |
| No | 38.5**** | 29.5 | 45.9**** | 27.9*** | 33.6 |
| Yes | 67.4 | 39.5 | 74.4 | 53.5 | 41.9 |
| Number of sexual abusers | | | | | |
| One abuser | 43.4* | 29.4** | 47.6**** | 30.1*** | 34.3 |
| More than one abuser | 63.6 | 50.0 | 90.9 | 63.6 | 45.5 |
| Abuse was... | | | | | |
| Not incest | 44.2 | 31.6 | 43.2*** | 30.5 | 33.7 |
| Incest | 48.6 | 32.9 | 67.1 | 40.0 | 38.6 |
| At the time, told someone | | | | | |
| No | 38.0** | 22.8*** | 38.0**** | 20.7**** | 23.9**** |
| Yes | 56.2 | 43.8 | 72.6 | 52.1 | 50.7 |
| They told someone without child's permission | | | | | |
| No | 42.6* | 28.7* | 48.4** | 32.0 | 33.6 |
| Yes | 55.8 | 41.9 | 67.4 | 41.9 | 41.9 |
| Discussed abuse within 1 year of abuse | | | | | |
| No | 44.9 | 31.9 | 55.1** | 34.8 | 34.8 |
| Yes | 47.1 | 29.4 | 29.4 | 23.5 | 35.3 |

Two-sided chi-square test: *$p$<.10. **$p$<.05. ***$p$<.01. ****$p$<.001

Other variables also were related to the behavioral dimension of psychosexual functioning. The odds ratio of having problems with touch was almost 3 times as large for respondents who said that the abuse was incest as it was for those who did not report incest. Telling appeared to be related to having problems with touch and problems with arousal. The odds ratio of having problems with touch was 3.56 times as large for the respondents who told someone about the abuse at the time as they were for respondents who did not tell. The odds ratio of having problems with arousal was 3.65 times as large for the respondents who told someone about the abuse at the time as they were for respondents who did not tell.

Telling also appeared to moderate the relationship between age and problems with touch. Among respondents who told someone about the abuse, the odds ratio of having a problem with touch was almost 8 times as large for adults who were older when the abuse began as it was for adults

**Table 3** Multivariate relationships among predictors, moderators and psychosexual functioning ($p<.05$ unless noted)

| | Emotional | | Behavioral | | Evaluative |
|---|---|---|---|---|---|
| | Afraid of sex | Felt guilty during sex | Had problems with touch | Had problems with arousal | Was dissatisfied with sex |
| Respondent... | | | | | |
| Was older at first abuse | 4.28 (1.68, 10.96) | 2.50 (0.97, 6.49)* | NS | NS | 2.86 (1.15, 7.12) |
| Was injured by sexual abuser | 3.66 (1.51, 8.89) | NS | 2.25 (0.88,5.71)* | 2.17 (0.91, 5.17)* | NS |
| Was abused by more than one abuser | NS | 3.62 (1.15, 11.40) | 6.16 (1.24, 30.60) | 3.47 (1.08, 11.13) | NS |
| Said abuse was incest | NS | NS | 2.91 (1.33, 6.36) | NS | NS |
| Told someone at the time | NS | 2.44 (1.17, 5.07) | 3.56 (1.67, 7.60) | 3.65 (1.72, 7.75) | 3.20 (1.55, 6.61) |
| Interactions | | | | | |
| At the time, told | | | | | |
| X Age | 14.01 (2.64, 74.52)* | NS | 7.95 (2.02, 31.24) | NS | NS |
| At the time, did not tell | | | | | |
| X Age | 2.44 (0.71, 8.41)* | NS | 0.82 (0.25, 2.63) | NS | NS |

* Marginally significant: $p<.10$

who were younger. Among respondents who did not tell someone about the abuse, the odds ratio of having a problem with touch did not differ substantially (odds ratio=.82) between adults who were older and who were younger at the time of the abuse.

*Evaluative Dimension* Relatively few variables influenced the evaluative dimension of psychosexual functioning. The odds ratio of being dissatisfied with sex was almost three times as large for adults who were older when the abuse began as they were for adults who were younger when the abuse began. Telling, once again, negatively affected psychosexual functioning. The odds ratio of being dissatisfied with sex was 3.2 times as large for the respondents who told someone about the abuse at the time as it was for the respondents who did not tell.

## Discussion

The primary purpose of the study was to understand variability in psychosexual functioning among adults who were sexually abused as children. To do this, we examined the effect of characteristics of the sexual abuse and disclosure on three dimensions of psychosexual functioning (emotional, behavioral, and evaluative). We also examined the moderating influence of disclosure on the relationship between, for example, severity and psychosexual functioning. Our results show that different factors may influence the different dimensions of psychosexual functioning. Although the five outcome variables were correlated, each outcome had a different set of predictors.

Two factors negatively affected all of the dimensions of psychosexual functioning: age at the time of abuse and telling someone at the time of the abuse. Being older at the time of the abuse increased the likelihood of being afraid of sex and feeling guilty during sex and increased the likelihood of being dissatisfied with sex during adulthood. These results are consistent with Finkelhor and Browne's (1985) traumagenic dynamics model, which asserts that older children may experience more sexual trauma from CSA due to their understanding of the sexual implications of the abuse. Younger children have an emerging understanding of sexuality between the ages of three and seven that is centered primarily on anatomical difference, privacy, and amusement. Typically, younger children do not have a functional or relational understanding of sexual organs and, therefore, have a limited understanding of the implications of sexual contact or of abuse. Conversely, children who are older at the time of the abuse may be more likely to understand its implications and that social norms were violated. Older children may be more likely to experience emotions such as guilt, shame, and fear—emotions often reinforced through manipulative tactics of the abuser. Although we did not find a relationship between being older and problems with touch or arousal (the behavioral dimension), our results showed being older negatively affects the emotional and evaluative dimensions of psychosexual functioning.

Telling someone at the time of the abuse had a negative effect on psychosexual functioning. It was the only factor that increased the likelihood of four out of five outcomes. Telling may have adversely affected respondents because they received an inappropriate or harmful response. For example, a non-offending caregiver may not have believed

the child or may have minimized the abuse or blamed the child for the abuse. An unsupportive response may magnify feelings of shame and betrayal, and undermine adult psychosexual functioning. Another possible explanation for the harmful effect of telling is that other people found out about the abuse (e.g., law enforcement, child protective services), intensifying the child's feelings of shame, betrayal and powerlessness. Both of these explanations are consistent with Finkelhor and Browne's argument that post-abuse factors (i.e., response to disclosure) may increase the child's trauma, possibly leading to poorer functioning as an adult.

In addition to the direct effect of telling someone at the time of the abuse on psychosexual functioning, telling also had an indirect effect. Among respondents who told, adults who were older at the time of first abuse were 14 times more likely to report being afraid of sex and nearly eight times more likely to have problems with touch than respondents who were younger. Older children who tell may receive a more negative, harmful response than younger children. For example, if an older child tells a caregiver, the caregiver may conclude the child was partly or wholly responsible for the abuse or could have prevented it. Responses that are unsupportive or blaming may increase children's feelings of fear and guilt—feelings they may carry into their adult sexual relationships.

Two indicators of severity—being injured by the abuser or being abused by more than one person—negatively influenced the emotional and behavioral dimensions of psychosexual functioning, but not the evaluative dimension. Respondents who were injured by the sexual abuser were more likely to experience fear of sex, problems with touch, and problems with arousal than respondents who were not injured. During adulthood, the act of sex may trigger memories of the physical pain that occurred during the CSA. If sex becomes associated with physical pain, then an adult with a history of CSA may adopt a maladaptive schema based on fear of sex and anticipatory physical pain (Leonard and Follette 2002; Greenberg and Paivio 1997). Avoiding emotional pain associated with past abuse may also contribute to problems with touch and problems with arousal (Follette 1994; Hayes et al. 1996).

Being abused by more than one abuser increased the likelihood of feeling guilt during sex, problems with touch, and problems with arousal. A child who is abused by more than one person may incorrectly interpret multiple abusers as a sign that the child asked for the abuse or allowed the abuse to continue (even though he or she knew it was wrong). Thus, having more than one abuser may result in higher levels of guilt. Multiple abusers may also increase the level of traumatic sexualization and sense of betrayal, contributing to problems with touch and arousal during adulthood.

Incest increased the likelihood of having problems with touch. Most relationships within families include affection and physical contact. When these acts of affection and care are intermingled with acts of sexual abuse, it is likely that the child will experience confusion and apprehension. The child may be unclear if future physical contact will be a precursor to subsequent acts of sexual abuse. Therefore, incest not only assaults notions of trust during childhood, it may impair an adult's ability to differentiate between sexual and non-sexual physical touch.

This study had both strengths and limitations. Two strengths included conceptualizing and measuring more than one dimension of psychosexual functioning and examining the effect of potential moderators. By identifying characteristics of abuse and disclosure that influence different dimensions of psychosexual functioning, this study advanced our understanding of sexual functioning among adults who were sexually abused during childhood. Nevertheless, several limitations should be noted. First, the findings are based on data collected through retrospective, self-report without independent confirmation from other sources. Because some of the respondents recalled events that occurred decades earlier, it is possible that memory deterioration or recall bias may have affected the accuracy of responses on variables such as the duration of the sexual abuse or the length of time it took the respondent to discuss the abuse in-depth.

A second limitation of this study is that we were unable to include some potentially important factors that may help explain psychosexual functioning more fully. For example, we only found two factors related to dissatisfaction with sex: age at first abuse and telling. This evaluative dimension of psychosexual functioning is likely to be influenced by several other factors, such as the quality of their current relationship or the level of partner support. Because many researchers have found a relationship between CSA and lower relationship satisfaction (Dennerstein et al. 2004; Davis et al. 2001; Fleming et al. 1999; Friesen et al. 2010), future research on psychosexual functioning should include measures of relationship quality. The heterogeneity among this sample could also be attributed to differences in coping strategies and should be considered in future research.

Another important factor not included in this study was the effect of other types of victimization. For example, researchers have found that physical and emotional abuse during childhood was related to problems in sexual functioning during adulthood (Davis et al. 2001; Meston et al. 1999; Mullen et al. 1994). Other studies have confirmed a relationship between CSA and sexual revictimization during adulthood (Arata 2002; Krahé 2000; LeMieux and Byers 2008). These other types of victimization experienced during childhood and adulthood may compound the sexual trauma of CSA, resulting in more severe or different psychosexual problems. Although we were able to examine physical assault by the abuser and

controlled for the effect of adult sexual victimization, future research should examine the effect of multiple victimization during childhood and adulthood on psychosexual functioning.

Finally, there is enormous variability among studies on how each dimension of psychosexual functioning is measured. Researchers often measure the emotional dimension of psychosexual functioning with three or fewer items. Browning and Laumann (1997), for example, examined stress and anxiety about sexual performance. Meston et al. (2006) included frequency of anger, fear, and anxiety during sex, and Noll et al. (2003) examined fear when thinking about sex and embarrassment. In the current study, we measured the emotional dimension by examining fear of sex and guilt during sex. To increase our understanding of psychosexual functioning and improve our ability to compare results across studies, it would be useful to have standardized measures for each dimension of psychosexual functioning.

In our multivariate model, age, severity (being injured and abuse by more than one abuser) and telling emerged as the most important factors influencing psychosexual functioning. These results have implications for prevention and treatment. Apart from the obvious need to prevent CSA from occurring in the first place, we need to focus attention on improving the response by caregivers and others when a child discloses that he or she has been sexually abused. Although this appears to be important for psychosexual functioning in the current study, other studies have found that an adequate response to disclosure is important for other indicators of well-being as well (Finkelhor and Browne 1985; Najman et al. 2005). By raising awareness of CSA and the importance of a sympathetic and protective response to disclosure, community education campaigns could be a valuable prevention strategy.

When treating adults with histories of CSA who report problems in sexual functioning, practitioners need to assess how old the clients were when they were abused, how severe the abuse was, and whether they told someone. If these factors are identified during assessment, practitioners can then discuss the possible effects of them on sexual functioning during treatment. Exploring the client's experience of disclosure, for example, may help him or her better understand feelings related to current psychosexual functioning. In couples counseling, it is also important that both the survivor and his or her partner are aware of the impact of disclosure on psychosexual functioning. One of the therapeutic goals may be to create a supportive, empathetic environment to promote discussion of the CSA between partners.

Our results also suggest that practitioners who treat adults with CSA histories for sexual functioning problems should assess all three dimensions of psychosexual functioning. Many clients may identify arousal as their primary or only concern. However, our study found that the different dimensions of functioning were moderately correlated. Because they are inter-related, pharmacological approaches that only target the physiological dimension of sexual dysfunction (e.g., arousal) may be ineffective (Berman et al. 2001). Thus, to decrease problems with touch and arousal and to increase satisfaction with sex, practitioners may need to address the underlying emotional aspects such as fear of sex and guilt during sex.

The dynamics of CSA often contribute to these emotions (e.g., fear of sex and guilt during sex) that can undermine psychosexual functioning. The abuser often uses a high level of psychological manipulation to enforce compliance and promote secrecy. The manipulation can involve shifting blame and responsibility away from the abuser and creating a schema of self-culpability for the child. When faced with vulnerabilities inherent in intimate sexual relationships during adulthood, it is not surprising, then, that adults who were sexually abused during childhood may experience difficulties with trust, guilt, and fear. Therapeutically, it may be important for practitioners to help the client understand which difficulties are common in adult relationships and which are more likely due to the trauma of CSA.

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## References

Arata, C. M. (2002). Child sexual abuse and sexual revictimization. *Clinical Psychology: Science and Practice, 9*, 136–142.

Bartoi, M. G., & Kinder, B. N. (1998). Effects of child and adult sexual abuse on adult sexuality. *Journal of Sex & Martial Therapy, 24*, 75–90.

Beitchman, J. H., Zucker, K. J., Hood, J. E., daCosta, G. A., & Akman, D. (1991). A review of the short-term effects of child sexual abuse. *Child Abuse & Neglect, 15*, 537–556.

Berman, L. A., Berman, J. R., Bruck, D., Pawar, R. V., & Goldstein, I. (2001). Pharmacotherapy or psychotherapy?: effective treatment for FSD related to unresolved childhood sexual abuse. *Journal of Sex & Marital Therapy, 27*, 421–425.

Brown, L. K., Lourie, K. J., Zlotnick, C., & Cohn, J. (2000). Impact of sexual abuse on the HIV-risk-related behavior of adolescents in intensive psychiatric treatment. *American Journal of Psychiatry, 157*, 1413–1415.

Browning, C. R., & Laumann, E. O. (1997). Sexual contact between children and adults: a life course perspective. *American Sociological Review, 62*, 540–560.

Davis, J. L., & Petretic-Jackson, P. A. (2000). The impact of child sexual abuse on adult interpersonal functioning: a review and synthesis of the empirical literature. *Aggression and Violent Behavior, 5*, 291–328.

Davis, J. L., Petretic-Jackson, P. A., & Ting, L. (2001). Intimacy dysfunction and trauma symptomatology: long-term correlates of

different types of child abuse. *Journal of Traumatic Stress, 14*, 63–79.

Dennerstein, L., Guthrie, J. R., & Alford, S. (2004). Childhood abuse and its association with mid-aged women's sexual functioning. *Journal of Sex and Martial Therapy, 30*, 225–234.

Farley, M., & Keaney, J. (1997). Physical symptoms, somatization, and dissociation in women survivors of childhood sexual assault. *Women & Health, 25*, 33–45.

Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: a conceptualization. *American Journal of Orthopsychiatry, 55*, 530–541.

Fleming, J., Mullen, P. E., Sibthorpe, B., & Bammer, G. (1999). The long-term impact of child sexual abuse in Australian women. *Child Abuse and Neglect, 23*, 145–159.

Follette, V. M. (1994). Survivors of child sexual abuse: treatment using contextual analysis. In S. C. Hayes, N. S. Jacobson, V. M. Follette, & M. Dougher (Eds.), *Acceptance and change: Content and context in psychotherapy* (pp. 225–268). Reno: Context Press.

Friesen, M. D., Woodward, L. J., Horwood, L. J., & Fergusson, D. M. (2010). Childhood exposure to sexual abuse and partnership outcomes at age 30. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences, 40*, 679–688.

Greenberg, L. S., & Paivio, S. (1997). *Working with emotions in psychotherapy*. New York: Guildford.

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: a functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*, 1152–1168.

Holmes, W. C. (2008). Men's self-definitions of abusive childhood sexual experiences and potentially related risky behavioral and psychriatric outcomes. *Child Abuse & Neglect, 32*, 83–97.

Hunter, S. V. (2006). Understanding the complexity of child sexual abuse: a review of the literature with implications for family counseling. *The Family Journal: Counseling and Therapy for Couples and Families, 14*, 349–358.

Jehu, D. (1988). *Beyond sexual abuse: Therapy with women who were sexual abuse victims*. New York: Wiley.

Katz, J., & Tirone, V. (2008). Childhood sexual abuse predicts women's unwanted sexual interactions and sexual satisfaction in adult romantic relationships. In M. J. Smith (Ed.), *Child sexual abuse: Issues and challenges* (pp. 67–86). Hauppauge: Nova Science.

Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children. *Psychological Bulletin, 113*, 164–180.

Kinzl, J. F., Traweger, C., & Biebel, W. (1995). Sexual dysfunctions: relationship to childhood sexual abuse and early family experiences in a nonclinical sample. *Child Abuse and Neglect, 19*, 785–792.

Knutson, J. F. (1995). Psychological characteristics of maltreated children: putative risk factors and consequences. *Annual Review of Psychology, 46*, 401–431.

Krahé, B. (2000). Childhood sexual abuse and revictimization in adolescence and adulthood. *Journal of Loss and Trauma, 5*, 149–165.

Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: The University of Chicago Press.

LeMieux, S. R., & Byers, E. S. (2008). The sexual well-being of women who have experienced child sexual abuse. *Psychology of Women Quarterly, 32*, 126–144.

Leonard, L. M., & Follette, V. M. (2002). Sexual functioning in women reporting a history of child sexual abuse: review of the empirical literature and clinical implications. *Annual Review of Sex Research, 13*, 346–388.

Leonard, L. M., Iverson, K. M., & Follette, V. M. (2008). Sexual functioning and sexual satisfaction among women who report a history of childhood and/or adolescent sexual abuse. *Journal of Sex & Marital Therapy, 34*, 375–384.

Loeb, T. B., Williams, J. K., Carmona, J. V., Rivkin, I., Wyatt, G. E., Chin, D., et al. (2002). Child sexual abuse: review of the empirical literature and clinical implications. *Annual Review of Sex Research, 13*, 307–345.

McClellan, J., McCurry, C., Ronnei, M., Adams, J., Eisner, A., & Storck, M. (1996). Age of onset of sexual abuse: relationship to sexually inappropriate behaviors. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 1375–1383.

Meston, C. M., Heiman, J. R., & Trapnell, P. D. (1999). The relation between early abuse and adult sexuality. *The Journal of Sex Research, 36*, 385–395.

Meston, C., Rellini, A., & Heiman, J. (2006). Women's history of sexual abuse, their sexuality, and sexual self-schemas. *Journal of Consulting and Clinical Psychology, 74*, 229–236.

Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1994). The effect of child sexual abuse on social, interpersonal and sexual function in adult life. *British Journal of Psychiatry, 165*, 35–47.

Najman, J. M., Dunne, M. P., Purdle, D. M., Boyle, F. M., & Coxeter, P. M. (2005). Sexual abuse in childhood and sexual dysfunction in adulthood. *Archives of Sexual Behavior, 24*, 517–526.

Noll, J. G., Trickett, P. K., & Putnam, F. W. (2003). A prospective investigation of the impact of child sexual abuse on the development of sexuality. *Journal of Counseling and Clinical Psychology, 71*, 575–586.

O'Leary, P., Coohey, C., & Easton, S. D. (2010). The effect of severe child sexual abuse and disclosure on mental health during adulthood. *The Journal of Child Sexual Abuse, 19*, 275–289.

Polusny, M. A., & Follette, V. M. (1995). Long-term correlates of child sexual abuse: theory and review of the empirical literature. *Applied and Preventive Psychology, 4*, 143–166.

Putnam, F. W. (2003). Ten-year research update review: child sexual abuse. *Journal of American Academy of Child and Adolescent Psychiatry, 42*, 269–278.

Reissing, E. D., Binik, Y. M., Khalife, S., Cohen, D., & Amsel, R. (2003). Etiological correlates of vaginismus: sexual and physical abuse, sexual knowledge, sexual self-schema, & relationship adjustment. *Journal of Sex & Marital Therapy, 29*, 47–59.

Rellini, A., & Meston, C. (2007). Sexual function and satisfaction in adults based on the definition of child sexual abuse. *Journal of Sexual Medicine, 4*, 1312–1321.

Sarwer, D. B., & Durlak, J. A. (1996). Child sexual abuse as a predictor of adult sexual dysfunction: a study of couples seeking sex therapy. *Child Abuse and Neglect, 20*, 963–972.

Sikkema, K. J., Hansen, N. B., Meade, C. S., Kochman, A., & Fox, A. M. (2009). Psychosocial predictors of sexual HIV transmission risk behavior among HIV-positive adults with a sexual abuse history in childhood. *Archives of Sexual Behavior, 30*, 121–134.

Spataro, J., Moss, S. A., & Wells, D. L. (2001). Child sexual abuse: a reality for both sexes. *Australian Psychologist, 36*, 177–183.

Westerlund, E. (1992). *Women's sexuality after childhood incest*. New York: W.W. Norton.