Gender as a predictor of posttraumatic stress symptoms and externalizing behavior problems in sexually abused children

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Abstract

Despite the proliferation of studies documenting outcomes in sexually abused victims, gender differences remain understudied. The bulk of studies have relied on retrospective samples of adults with insufficient representation of male victims to explore gender specificities. This study examined differential outcomes among boy and girl victims of sexual abuse. A predictive model of outcomes including abuse characteristics and sense of guilt as mediators was proposed. Path analysis was conducted with a sample of 447 sexually abused children (319 girls and 128 boys), aged 6 to 12. Being a girl was a predictor of posttraumatic stress symptoms, while being a boy was a predictor of externalizing problems. Being a boy was also associated with more severe abuse, which in turn predicted posttraumatic stress symptoms. Child's gender was not related to perpetrator's relationship to the child or sense of guilt. However, sense of guilt predicted posttraumatic stress symptoms and externalizing problems while perpetrator's relationship to the child predicted externalizing problems. Gender specificities should be further studied among sexually abused children, as boys and girls appear to manifest different outcomes. Sense of guilt should be a target in intervention for sexually abused children, as results highlight its link to heightened negative outcomes.

Keywords

1. Introduction

Sexual abuse (SA) is an important social issue that affects both girls and boys. According to a worldwide meta-analysis, 1 in 5 women and 1 in 10 men report being sexually victimized prior to the age of 18 (Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). Past studies have clearly demonstrated that childhood SA is a significant risk factor for depression, anxiety, low self-esteem, suicide attempts, as well as alcohol and drug dependence (Fergusson, McLeod, & Horwood, 2013). In the short term, children who have disclosed SA are likely to show posttraumatic stress disorder (PTSD) symptoms (Hébert, Langevin, & Daigneault, 2016). In addition, relative to their non-abused peers, child victims

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present significant depressive and anxiety symptoms and externalizing behavior problems such as anger and aggressiveness (Hébert, 2011).

With the aim of orienting treatment priorities and identifying relevant targets for intervention, studies have explored factors that impact severity of symptoms, including characteristics of the abuse sustained (severity of the acts, duration of the abuse, the perpetrator's relationship to the child), attributions, coping strategies, as well as social support (Cantón-Cortés, Cantón, Justicia, & Cortés, 2011; Zajac, Ralston, & Smith, 2015). Besides these potential factors, gender of the child victim may be associated with outcomes of SA. Yet, few studies have explored gender differences among sexually abused children. In the vast majority of childhood SA studies, boys are either completely absent from samples or insufficiently represented, making it difficult to conduct gender-specific analyses (Maikovich-Fong & Jaffee, 2010; Villeneuve Cyr & Hébert, 2011).

1.1. Gender differences: Findings from past studies

Past studies of adult samples suggest that sexually abused women report more internalizing problems than sexually abused men, as well as PTSD (Blain, Galovski, & Robinson, 2010). For women survivors of SA, some studies suggest that they show more anxiety and depressive symptoms (Banyard, Williams, & Siegel, 2004). However, other studies report no gender differences between men and women victims of SA regarding depressive symptoms (Arnow, Blasey, Hunkeler, Lee, & Hayward, 2011) and PTSD (Tolin & Foa, 2006). Adult victims were also found more likely to have alcohol and drug problems than non-adult victims, but those risks appear similar for men and women (Dube et al., 2005). From their 30-year longitudinal study on survivors of SA, Fergusson et al. (2013) observed that gender did not impact adult developmental outcomes. While studies among adult samples are important to document long-term SA consequences, retrospective studies may include biases related to memory and may introduce significant measurement error (Hardt & Rutter, 2004).

Gender differences have also been explored in samples of teenagers and children. Sexually abused teenaged boy victims seem to express more externalizing difficulties, such as delinquent behaviors, sexual risk behaviors and alcohol and drug abuse compared to sexually abused girls (Chandy, Blum, & Resnick, 1996; Garnefski & Arends, 1998). In their study based on examination of judicial and social reports, Soylu et al. (2016) observed that girl victims under 18 had more psychiatric and major depressive disorder than boys ($n =$ 248), yet PTSD was as prevalent in girls and boys. According to Villeneuve Cyr and Hébert (2011), school-aged SA girls reported more PTSD and anxiety symptoms than boys. Boys ($n = 33$) tended to have more externalizing behaviors than girls whereas no gender difference was found for internalizing problems (Villeneuve Cyr & Hébert, 2011). These results are in contrast with those reported by Coohey (2010) with preteens aged 11 to 14. This study pointed out that boys ($n = 31$) were twice as likely to have internalizing behaviors (52% vs. 24%) than girls (Coohey, 2010). However, Coohey argued that "sexually abused boys may be more likely to internalize during early adolescence and externalize during later adolescence, whereas sexually abused girls may be more likely than boys to exhibit internalizing behavior throughout adolescence" (Coohey, 2010, p. 860). Another study conducted by Maikovich-Fong and Jaffee (2010) observed no difference between boy ($n =$

117) and girl victims of SA, aged 4 to 16, for internalizing, externalizing and PSTD symptoms.

These contradictory results may relate to methodological differences, including the age of the participants in the different samples, the definition of SA that varied across these studies, and the underrepresentation of boys. Indeed, studies on children and adolescents who have disclosed SA usually included around 30 boys only (Feiring, Taska, & Lewis, 1999), which limits the power to detect significant differences. Analyses of gender differences among SA victims are often limited to descriptive analyses and few studies have examined possible explanatory mechanisms. The present study will attempt to overcome these limitations by testing mediators of the relation between gender and outcomes in a large school-aged sample of SA victims.

1.2. Gender differences: Potential interpretations

A number of interpretations can be considered to account for gender differences in SA outcomes. First, gender role in socialization may contribute to gender differences. For example, boys may be less often reprimanded than girls for displaying aggressive behaviors, making them more likely to develop externalizing symptoms, and making the latter more prone to develop internalized symptoms.

Second, the SA experienced by boys and girls might be different, which could impact the type and intensity of outcomes. For example, some studies have revealed that SA perpetrated toward boys is more likely to involve severe or intrusive gestures (Edinburgh, Saewyc, & Levitt, 2006; Soylu et al., 2016; Villeneuve Cyr & Hébert, 2011). The greater severity of SA experienced by boys may explain the higher level of externalizing problems observed among male victims (Banyard et al., 2004). Being a girl seems to be associated with longer duration of SA and a closer perpetrator (Coohey, 2010; Soylu et al., 2016; Villeneuve Cyr & Hébert, 2011). These characteristics may negatively influence SA outcomes (Hébert, Tremblay, Parent, Daignault, & Piché, 2006; Yancey & Hansen, 2010).

Third, boys may experience more guilt because of the internalized stigma related to same gender perpetrator (Banyard et al., 2004). The vast majority of reported child abusers are male (Dube et al., 2005; Soylu et al., 2016), which means that boys, compared to girls, are often abused by a same gender person. This might create an additional issue, unique to boys, about masculinity and sexual orientation (Banyard et al., 2004). Boys may report a greater sense of guilt because they may perceive that they were not able to protect themselves, which is a prescribed role for men. In fact, these gender norms may reinforce guilt felt by boys, which may influence outcomes and delay disclosure (Gagnier & Collin-Vézina, 2016). Sense of guilt and self-blame are correlates that have been shown to mediate SA outcomes (Feiring & Cleland, 2007), such as PTSD symptoms (Cantón-Cortés et al., 2011). According to the traumagenic dynamics theory of Finkelhor and Browne (1985), stigmatization, which encompasses guilt and shame, contributes to the apparition of externalizing behavior problems (drug and alcohol abuse, criminal activity, suicide attempts). If boys do indeed have a higher sense of guilt than girls, they may consequently develop more externalized behavior problems following SA.

1.3. The present study

The aim of this study is to examine the role of gender in SA outcomes across 6 to 12 year old child victims of SA. A predictive model of SA outcomes including SA characteristics and sense of guilt as mediators (see Figure 1) is proposed. We hypothesize that being a girl will predict more PTSD symptoms and that this association will be mediated by the frequency of SA and the relationship with the perpetrator. We also hypothesize that being a boy will be associated with more behavior problems and that this relationship will be mediated by the severity of the abuse and sense of guilt.

2. Method

2.1. Participants

The sample consisted of 447 sexually abused children (319 girls and 128 boys), aged 6 to 12 ($M = 8.99$, $SD = 2.05$) and one of their non-offending parental figures (347 mothers, 51 fathers, 45 other significant parental figures and 4 youth center educators). Participants were recruited during the initial evaluation at different centers located in the province of Quebec offering specialized services for sexually abused children. All families of children aged 6 to 12 consulting the agencies were invited to participate and during the study, 447 families accepted to participate while 42 out of 489 eligible families declined to participate. A total of 86.3% of the participants were French Canadians. Table 1 shows socio-demographic characteristics for the sample. No significant difference was observed between girls and boys for any of these characteristics.

2.2. Measures

2.2.1. Socio-demographic Characteristics—Parental figures completed a questionnaire on socio-demographic regarding family structure, family income, education level, child's age and child's gender. Child's gender was coded as follows: 0 = girl, 1 = boy.

2.2.2. Characteristics of SA—An adaptation of the *History of Victimization Form* (HVF; Parent & Hébert, 2006) was used to codify SA characteristics based on information from the child's medical or clinical record by trained research assistants. Prior analyses of inter-rater reliability were based on 30 records and indicated high agreement; the median intraclass correlation was 0.86 (Hébert et al., 2006). When information regarding SA history and characteristics was missing from the medical or clinical record, we inquired from other sources (parental figures). Otherwise, the lacking information was treated as missing data. The severity of the acts involved was coded as 1 = less severe (exhibitionism, voyeurism, kisses, exposure to pornographic material, physical contact over clothing), 2 = severe (physical contact under clothing, touching of the genitals), and 3 = very severe (oral sex, vaginal or anal penetration or attempted penetration). The frequency of the SA was categorized as 1 = single episode, 2 = some events (less than 6 months), and 3 = repetitive or chronic (more than 6 months). Perpetrator's relationship to the child included four categories: 1 = immediate family (parent, stepparent, sibling and stepparent's child), 2 = extended family (uncle, aunt, cousin and grandparent), 3 = family acquaintance (such as foster parent, daycare provider, child's friend, neighbor) and 4 = stranger. For the few situations that involved more than one perpetrator ($n = 27$), the variable was coded for the

perpetrator who had the closest relationship to the child. Gender and age of the perpetrator were also collected in the HVF.

2.2.3. PTSD Symptoms and Sense of Guilt—Children completed the *Children's Impact of Traumatic Events Scale II* (CITES-II; Wolfe, 2002). The scale includes 46 items evaluating re-experiencing symptoms, avoidant behaviors and hyperarousal problems. Participants answered questions by referring to the SA symptoms experienced in the last month. A subscale of the CITES-II, which includes 3 items, measured the sense of guilt revealed by the child specific to the SA experienced. The scale for each item of the CITES-II is 0 = not true, 1 = sometimes true, and 2 = very true. Scores are calculated by adding the results of each item and ranged from 0 to 92 for the global scale and from 0 to 6 for the sense of guilt subscale. Internal consistency was excellent for the global PTSD symptoms subscale (α = 0.92) and acceptable for the sense of guilt subscale (α = 0.71).

2.2.4. Internalizing and Externalizing Behavior Problems—The *Child Behavior Checklist* (CBCL; Achenbach & Rescorla, 2001) was completed by the parental figure. This instrument, consisting of 113 items, covers behavioral problems observed in the last two months in children aged 6 to 18. Internalizing problems include anxious/depressed symptoms, withdrawal and somatic complaints. Externalizing problems refer to rule-breaking and aggressive behaviors. Each item of the CBCL is ranked using the following scale: 0 = not true, 1 = somewhat or sometimes true, and 2 = very true or often true. *T*-scores based on normalization samples were used for this scale. *T*-scores above 63 on the internalizing and externalizing subscales are considered clinically significant (Achenbach & Rescorla, 2001). A total of 39.8% of the sample reached the clinical threshold for internalizing problems and 46.8% for externalizing problems. For this study, internal consistency was good for internalizing problems (α = 0.88) and excellent for externalizing problems (α = 0.93).

2.3. Procedure

Families were invited to participate in the research project on children victims of SA and their parents during their first visit to the specialized center. For those who agreed, the consent form was explained and signed. Confidentiality was assured to participants. The child completed the questionnaire with the assistance of a trained research assistant in psychology or sexology. Meanwhile, the parent was asked to complete a questionnaire alone or with the assistance of a research assistant if needed. This study was approved by the Human Research Review Committee of Ste-Justine Hospital and the Human Research Review Committee of the Université du Québec à Montréal.

2.4. Data Analysis

T-tests and chi-square tests were first conducted to examine gender differences in characteristics and symptoms of SA. In addition, correlational analyses allowed the identification of variables that were significantly associated with the victim's gender as well as examination of associations between the studied variables. Results were used to identify the relevant variables to be included in the model. Path analysis was conducted to test the predictive model of PTSD symptoms and behavior problems with victim's gender as the

exogenous variable and abuse characteristics as well as guilt as mediators. Various indices were used to determine whether the specified model adequately fitted the observed data. Good fit was indicated by a non-significant chi-square or a ratio of chi-square to degrees of freedom (χ^2/df) less than 3 (Jöreskog & Sörbom, 1993), a comparative fit index (CFI) higher than 0.95 (Hu & Bentler, 1999), and root mean square error of approximation (RMSEA) less than 0.06 with a confidence interval (CI) ranging between 0.00 and 0.08 (Hu & Bentler, 1999). Considering the small proportion of missing data (between 0.4% and 5.8%) for the studied variables and a non-significant result for the Little test ($\chi^2_{(73)} = 71.606$, $p = 0.524$), data was assumed to be missing completely at random. Mplus 7.0 (Muthén & Muthén, 1998–2015) was used to perform path analysis.

3. Results

3.1. Gender differences in characteristics of SA

Chi-square tests showed some gender differences in characteristics of SA experienced (see Table 2). First, boys (74.6%) were more likely than girls (56.4%) to have suffered intrusive acts ($\chi^2_{(2)} = 12.64$; $p = 0.002$). Second, regarding duration of the SA, half (51.3%) of the boys had experienced some events of SA, compared to 1 in 3 (36.4%) girls ($\chi^2_{(2)} = 7.87$, $p = 0.020$). Girls (38.1%) were more likely to report repetitive or chronic events than boys (30.2%), but this difference was not statistically significant. Third, just over half (52.2%) of the girls were abused by an adult aged between 20 and 59 years old, compared to 37.1% of the boys ($\chi^2_{(3)} = 14.45$; $p = 0.002$). The boys (43.6%) were in turn more often the victims of a juvenile perpetrator under 15 years old than girls (27.6%). No gender difference was found regarding perpetrator's relationship to the child ($\chi^2_{(3)} = 1.36$; $p = 0.716$) and perpetrator's gender ($\chi^2_{(1)} = 0.39$; $p = 0.532$), which was, for the majority of the sample, a male family member.

3.2. Gender differences in symptoms of SA

T-tests (see Table 3) revealed that girls ($M = 46.09$; $SD = 17.15$) showed higher global PTSD scores ($t_{(425)} = 3.23$; $p = 0.001$; Cohen's $d = 0.35$) than boys ($M = 39.92$; $SD = 19.38$). As shown in Table 3, gender differences were observed for the three subscales of the CITES-II. No significant difference between girls and boys was observed for the sense of guilt specific to SA ($t_{(425)} = 1.05$; $p = 0.297$; Cohen's $d = 0.11$). Boys ($M = 64.71$; $SD = 10.86$) were reported by parents to display greater externalizing behavior problems ($t_{(425)} = -3.76$; $p < 0.001$; Cohen's $d = 0.40$) than girls ($M = 60.09$; $SD = 11.84$). No significant difference was found for internalizing problems ($t_{(425)} = -1.58$; $p = 0.114$; Cohen's $d = 0.17$) except for the withdrawal subscale ($t_{(425)} = -3.21$; $p = 0.001$; Cohen's $d = 0.34$), where boys ($M = 63.23$; $SD = 10.18$) had higher scores than girls ($M = 60.05$; $SD = 8.99$).

3.3. Correlations between the studied variables

Table 4 shows, for the total sample, correlation coefficients, means and standard deviations for characteristics and symptoms of SA. Severity was the only characteristic of SA associated with higher scores of PTSD symptoms. Furthermore, externalizing problems were associated with only one characteristic of SA, which is perpetrator's relationship to the child: a closer relationship to the perpetrator was associated with lower externalizing

problems. PTSD symptoms and externalizing problems were both positively associated with child's sense of guilt. Because the frequency of SA was not associated with any symptom of SA, it was not included into the predictive model. As internalizing problems were not associated with the child's gender, sense of guilt or abuse characteristics, the variable was excluded from the path model.

3.4. Mediation model

Path analysis was conducted to study gender as a predictor of SA symptoms, with sense of guilt and abuse characteristics as mediators. The Maximum Likelihood method of estimation was used and missing values were handled using Full Information Maximum Likelihood. The predictive model (see fig. 2) indicated a good fit to the data ($\chi^2_{(1)} = 0.07$; $p = 0.785$; $\chi^2/df = 0.07$; CFI = 1.00; RMSEA = 0.00 with 90% CI [0.00 – 0.08]). Being a girl predicted more PTSD symptoms ($\beta = -0.15$; $p < 0.001$), whereas being a boy predicted more externalizing problems ($\beta = 0.18$; $p < 0.001$). An indirect effect of gender on PTSD symptoms was also observed through severity of the abusive acts involved ($b = 0.61$ with 95% CI [0.11 – 1.37]), with a proportion of 9.9% of this effect going through abuse severity. Guilt and perpetrator's relationship to the child were not associated with child's gender ($\beta = -0.05$; $p = 0.297$ and $\beta = 0.04$; $p = 0.454$ respectively) and therefore did not mediate the relationship between gender, PTSD symptoms and externalizing problems. Results however suggest that sense of guilt was the most important predictor of PTSD symptoms ($\beta = 0.39$; $p < 0.001$), and also a predictor of externalizing problems ($\beta = 0.13$; $p = 0.008$). Moreover, having a distant relationship to the perpetrator predicted more externalizing problems ($\beta = 0.14$; $p = 0.003$), but was not associated with PTSD symptoms ($\beta = 0.07$; $p = 0.095$). The model explains 19% of the variance in PTSD symptoms and 7% of the variance in externalizing problems.

4. Discussion

The aim of this study was to examine the role of gender in SA outcomes in school-aged victims of SA by testing a predictive model including abuse characteristics and sense of guilt as mediators. Results indicated that boy and girl victims of SA seem to manifest different symptoms. Indeed, boys were more likely to display externalizing behavior problems, which is consistent with the literature (Banyard et al., 2004). The association between gender and PTSD seemed to be more complex. Results suggested that being a girl was directly associated with PTSD symptoms. For boys however, this relationship was mediated by the severity of abuse, as defined by the degree of intrusiveness of the sexual acts involved. Therefore, being a boy was related to a greater severity of abuse, which in turn predicted higher PTSD symptoms. Our results make an important contribution to better understanding the trajectories of children victims of SA, as few studies have included such a large number of boys in their samples. Girls seem more prone to experience traumatic symptoms (re-experiencing the trauma, avoidant behaviors and hyperarousal problems) following SA. For boys, the link between SA and PTSD symptoms seems less straightforward and more dependent on the type of abuse experienced. The current results suggest that boys are victims of more intrusive acts and that the more severe the abuse is, the more likely they are to experience PTSD symptoms.

Regarding externalizing symptoms, the current results suggest that compared to girls, boys express more aggressiveness and delinquency following SA. This is consistent with an interpretation that suggests that prescribed gender roles may influence SA outcomes (Banyard et al., 2004). Indeed, it is possible that boys express their negative emotions through these types of behavior problems, because it is more accepted for boys to show externalizing behaviors (Kim, Arnold, Fisher, & Zeljo, 2005). Another hypothesis that could explain why boys express more aggressiveness is the same gender-perpetrator issue (Banyard et al., 2004). Boys, who fear being stigmatized as homosexuals, may show more externalizing problems and less PTSD symptoms to correspond to gender norms (Connell, 2014). This interpretation is consistent with the idea that boys are confronted with additional issues impeding disclosure, such as fear of homophobic stigma (Collin-Vézina, De La Sablonnière-Griffin, Palmer, & Milne, 2015), and may be less likely to disclose abuse than girls (Hébert, Tourigny, Cyr, McDuff, & Joly, 2009; O'Leary & Barber, 2008).

The variable that was the most important predictor of SA outcomes in the model is sense of guilt. Yet, no gender difference was apparent as boys and girls revealed similar means of sense of guilt. This absence of gender difference may be explained by the young age of participants, who may not have yet internalized social attributions of blame. Male victims may have greater guilt regarding the SA during adolescence or adulthood. In our study, children that revealed higher sense of guilt had more PTSD symptoms and more externalizing problems. Sense of guilt as a predictor of PTSD symptoms has been observed among adults victims of SA (Cantón-Cortés et al., 2011; Feiring & Cleland, 2007), but to our knowledge had not been explored with sexually abused children. As Finkelhor and Browne (1985) conceptualized, even for children, believing that the abuse is partly one's fault exacerbates SA outcomes. Our results suggest that the sense of guilt expressed by child victims is a better predictor of SA outcomes than SA characteristics.

While it was not a mediator, perpetrator's relationship to the child predicted externalizing behavior problems. Our results showed that the more distant the relationship between the child and the perpetrator, the more likely the child is to present externalizing problems. This result was unexpected and contrary to what is reported in the literature (Yancey & Hansen, 2010). It is important to remain critical about this result, considering the distribution of the variable (only 2% of the sample had been abused by a stranger and 73% by a family member). One hypothesis could be that the more distant perpetrators (e.g. stranger) are more likely to use force to perpetrate the acts of abuse (Fischer & McDonald, 1998) and that this violence is associated with greater externalizing symptoms (Yancey & Hansen, 2010). However, the use of force did not correlate with any of the studied variables. Also, Kendall-Tackett et al. (1993) have underscored that the label of the perpetrator does not necessarily reflect the affective relationship between the child and the perpetrator. For example, a close friend of the family who is known by the child since his birth, may be more significant for him than his mother's new boyfriend. When the child is less emotionally attached to his perpetrator, it is possible that the young victim would feel more comfortable to express externalizing symptoms to show his difficulties. These symptoms would be more likely to be muted when the perpetrator is more proximal so as not to hurt or disturb the family, including the abuser. Similarly to results found by Bal, De Bourdeaudhuij, Crombez, and

Van Oost (2004) in an adolescent sample, the relationship between the perpetrator and the child was not associated with internalizing problems and PTSD symptoms in our study.

Although duration of the SA is frequently associated with SA symptoms (Yancey & Hansen, 2010), it was not correlated to SA outcomes in this study. This absence of correlation may be explained by the categorization of the frequency (single episode, less than 6 months, and more than 6 months). A different categorization could have led to different results. Otherwise, it is possible that frequency of SA has a low impact on SA symptoms in some samples. Regardless of the number of SA episodes, being victim of SA is an intrusive and traumatic event that may influence the child's behavior.

The descriptive analyses on characteristics of SA showed some differences between boys and girls. A total of 3 of 4 boys reported experiencing penetration or attempted penetration compared with 1 of 2 girls. Moreover, most boys were abused by a juvenile, while most girls were abused by an adult. Boys and girls seem to have experienced the same kind of SA in regard to duration, perpetrator's gender and the degree of proximity or relationship to the perpetrator. Coohey (2010) and Villeneuve Cyr and Hébert (2011) observed that girls were more often victims over a long period and by a perpetrator in a closer relationship. The discrepancy in results might be explained by the fact that these studies included fewer than 35 boys.

While boys and girls differed in scores of PTSD symptoms and externalizing problems, gender was not a predictor of internalizing problems. Studies conducted by Maikovich-Fong and Jaffee (2010) and Villeneuve Cyr and Hébert (2011) also observed no gender difference in internalizing problems among child victims of SA. In the current study, no difference was found for anxiety, depression and somatic complaints. However, parents of boys reported more withdrawal in their child than parents of girls. It is possible that soon after disclosure of the SA, boys and girls may show the same level of internalizing problems while gender differences might only appear at later developmental stages.

4.1. Implications of the study

Results suggest that boys and girls appear to reveal different SA outcomes. The fact that boys express more externalizing behavior problems compared to girls could allow better detection of signs associated with a situation of SA. For example, a young school-aged boy that shows aggressive behaviors during class may be trying to express his distress related to a traumatic event. Particular attention should also be given to boys who have experienced more intrusive SA, because they are more likely to display PTSD symptoms. It remains essential to conduct detailed assessments to identify intervention targets for each child victim.

Since sense of guilt was the most important predictor of SA outcomes, intervention strategies for sexually abused children should target this issue, as proposed in *Trauma-Focused Cognitive Behavior Therapy* (TF-CBT; Cohen, Mannarino, & Deblinger, 2006). During the therapy sessions, the child is encouraged to recognize that his thoughts have an impact on how he feels. With the support of the therapist, children reporting feeling guilty

about the SA are helped to realize that they are not responsible for the abuse, which in turn may reduce symptoms associated with SA.

TF-CBT was tested in a 16 sessions format without the trauma narrative. This version appeared particularly well suited for reducing externalizing problems (Deblinger, Mannarino, Cohen, Runyon, & Steer, 2011). The time normally accorded to the narrative can, when needed, be reinvested in other objectives, such as adequate parenting practices. The improvement of parental practices may explain the significant reduction of children's externalizing problems. This treatment modality could be more adapted for some of the young boys who show severe externalizing problems and few PTSD symptoms.

4.2. Strengths and limitations of the study

This study makes an important contribution to the literature on child victims of SA by overcoming some of past studies' limitations. The sample consisted of children who had recently disclosed the SA with a significant number of boys. Moreover, mediating variables have been included in an attempt to explain the differences between boy and girl victims of SA.

Although this study provides relevant information about gender differences among young child victims, it has some limitations. First, this cross-sectional study cannot establish a causal relationship between gender and SA outcomes, nor verify whether these gender differences are maintained over time. Second, only one mediation effect was validated in the predictive model, which could explain the low percentage of variance accounted for. Some important variables that can impact outcomes in SA children were not included in the present model and as such, future studies should examine coping and parental support as mediators of the relationship between gender and SA outcomes. Indeed, parental reactions following disclosure may be different according to the child's gender, and have an influence on the child's symptoms (Ullman & Filipas, 2005). Adding these variables could improve the understanding of the complex situations experienced by boy and girl victims, and thus increase the percentage of variance explained. Third, the study did not identify any predictor of internalizing problems among sexually abused children. In addition, the present analyses did not consider the possible impact of other forms of maltreatment (physical abuse, neglect, exposure to interparental violence) in the model of outcomes. Fourth, the scale used to measure sense of guilt contains a small number of items. To collect more accurate data, future studies should rely on a more comprehensive scale than can evaluate different aspects of guilt with greater sensitivity.

Future studies should include a second measurement time to verify if the gender difficulties persist over time and how trajectories of recovery may be gender-specific. The few longitudinal studies available suggest that girls report fewer difficulties in the long term but the difficulties reported by boys are maintained over time (Bernier, Hébert, & Collin-Vézina, 2013). If clinical interventions are focused only on PTSD symptoms, the externalizing behavior problems of boys may crystallize and accentuate over time.

5. Conclusion

Our goal was to highlight that boys represent a significant proportion of child victims of SA, and perhaps boys express their pain differently than girls. Including boys in SA studies and trying to explain gender differences may help to better understand the reality of these young victims, and thus promote more effective therapeutic and preventive interventions.

Acknowledgments

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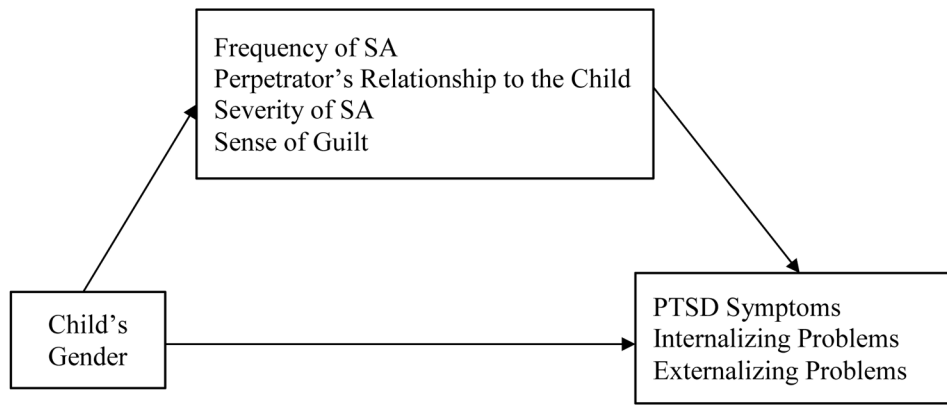
Figure 1.
Conceptual mediation model of the correlates of child sexual abuse.
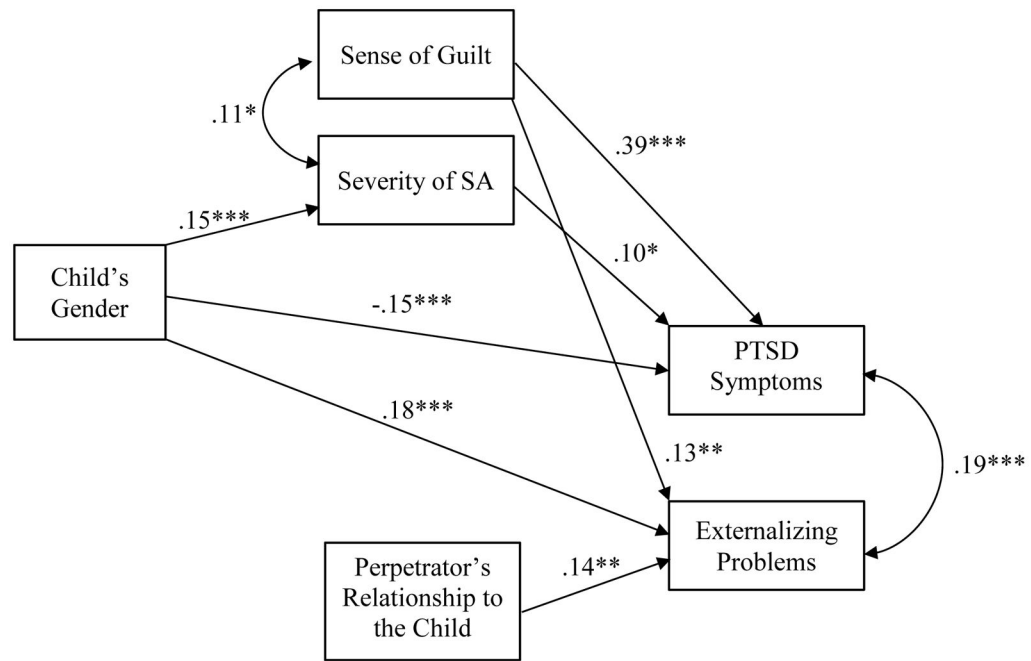
Figure 2.

Mediation model of the correlates of child sexual abuse.

Notes. The model coefficients are standardized. Only significant paths are illustrated.

Child's gender has been coded as 0 = girl and 1 = boy.

p < 0.05. **p* < 0.01. ***p* < 0.001.

Table 1

Socio-demographic Characteristics for Girls and Boys

Characteristic	Girls ($n = 319$)	Boys ($n = 128$)	Statistical tests	p
Mean age (SD)	9.07 (2.02)	8.79 (2.11)	$t_{(445)} = 1.29$	.197
Family structure			$\chi^2_{(3)} = 6.75$	.080
Intact family	18.1%	17.2%		
Single-parent family	44.1%	38.3%		
Stepfamily	27.9%	25.8%		
Foster family	9.9%	18.7%		
Family income			$\chi^2_{(3)} = 0.84$	.839
Less than $20,000	32.8%	33.0%		
$20,000 to $39,999	27.6%	28.0%		
$40,000 to $59,999	17.8%	14.4%		
$60,000 and more	21.8%	24.6%		
Mother's education level			$\chi^2_{(3)} = 3.75$	.290
Primary school	6.0%	1.7%		
High school	45.0%	45.4%		
College	36.8%	41.2%		
University	12.2%	11.7%		
Father's education level			$\chi^2_{(3)} = 2.29$	.515
Elementary school	11.1%	7.1%		
High school	50.2%	47.5%		
College	25.1%	31.3%		
University	13.6%	14.1%		

Table 2

SA Characteristics in Percentage (Adjusted Residuals) for Girls and Boys

Characteristic	Girls ($n = 319$)[a]	Boys ($n = 128$)[a]	Statistical tests	p
Severity level of SA			$\chi^2_{(2)} = 12.64$	.002
Less severe	12.1 (1.5)	7.1 (−1.5)		
Severe	31.5 (2.8)	18.3 (−2.8)		
Very severe	56.4 (−3.6)	74.6 (3.6)		
Frequency of SA			$\chi^2_{(2)} = 7.87$	.020
Single episode	25.5 (1.5)	18.5 (−1.5)		
Some events	36.4 (−2.8)	51.3 (2.8)		
Repetitive or chronic	38.1 (1.5)	30.2 (−1.5)		
Perp. relationship to the child			$\chi^2_{(3)} = 1.36$	.716
Immediate family	54.1 (1.0)	48.8 (−1.0)		
Extended family	19.2 (−.7)	22.0 (.7)		
Family acquaintance	24.5 (−.7)	27.6 (.7)		
Stranger	2.2 (.4)	1.6 (−.4)		
Perpetrator's gender			$\chi^2_{(1)} = 0.39$	.532
Male	93.7 (−.6)	95.2 (.6)		
Female	6.3 (.6)	4.8 (−.6)		
Perpetrator's age			$\chi^2_{(3)} = 14.45$	.002
Less than 15 years old	27.6 (−3.2)	43.6 (3.2)		
15–19 years old	11.9 (−1.0)	15.3 (1.0)		
20–59 years old	52.2 (2.9)	37.1 (−2.9)		
60 years old or more	8.3 (1.6)	4.0 (−1.6)		

[a] Because of missing data on some variables, number of participants ranges from 302 to 318 for girls and from 119 to 127 for boys.

Table 3

Mean Differences between Girls and Boys on Outcomes Variables

Variable	Girls		Boys		$t_{(425)}$	p	Cohen's d
	M	*SD*	*M*	*SD*			
PTSD symptoms	46.09	17.15	39.92	19.38	3.23	.001	0.35
Re-experiencing	12.83	6.68	9.61	7.09	4.41	<.001	0.43
Avoidance	18.30	6.01	16.95	6.81	2.01	.045	0.21
Hyperarousal	14.97	6.86	13.29	7.71	2.20	.028	0.21
Sense of guilt	1.56	1.76	1.36	1.79	1.05	.297	0.11
Internalizing problems	59.55	11.63	61.44	10.29	−1.58	.114	0.17
Anxious/depressed	60.72	9.56	61.82	9.34	−1.09	.276	0.12
Withdrawn	60.05	8.99	63.23	10.18	−3.21	.001	0.34
Somatic complaints	57.84	7.87	57.79	7.20	0.07	.946	0.01
Externalizing problems	60.09	11.84	64.71	10.86	−3.76	<.001	0.40
Rule-breaking	59.94	8.58	62.75	9.16	−3.02	.003	0.32
Aggressive	62.32	10.75	66.98	11.80	−3.97	<.001	0.42

Table 4

Summary of Correlations, Means and Standard Deviations for SA Characteristics and Scores on Outcomes Variables

Variables	1	2	3	4	5	6	M	SD
1. Severity of SA							-	-
2. Frequency of SA	.22***						-	-
3. Perp. relationship to the child	−.08	−.19***					-	-
4. Sense of guilt	.10*	.01	−.07	.			1.50	1.77
5. PTSD	.11*	−.01	.04	.40***			44.34	18.00
6. Internalizing problems	.04	.06	.08	.03	.16**		60.11	11.27
7. Externalizing problems	.05	.04	.14**	.11*	.20***	.67***	61.45	11.74

*
$p < 0.05$.

**
$p < 0.01$.

***
$p < 0.001$.