

Peer Victimization in Sexually Abused Children: The Mediating Role of Post-Traumatic Stress Symptoms

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Abstract:

Objectives: Studies suggest that sexually abused children are at higher risk of being victimized by their peers. However, little is known about the factors influencing the risk of peer victimization. This study aimed to examine whether post-traumatic stress symptoms mediated the relationship between CSA-specific self-blame and peer victimization in sexually abused children.

Method: A sample of 352 children (232 girls and 120 boys), aged 5-14, victims of sexual abuse were recruited. Children completed the Children's Impact of Traumatic Events Scale II (CITES II; Wolfe, 2002) assessing post-traumatic stress symptoms and CSA-specific self-blame. Peer victimization was assessed with a cross-informant measure (Ladd & Kochenderfer-Ladd, 2002) completed by the child, the parent and the teacher.

Results: Results of logistic regression analyses revealed that post-traumatic stress symptoms are positively associated with self-reported peer victimization, while self-blame is only associated with parents' reports of the child peer victimization. A structural model revealed that post-traumatic stress symptoms mediated the relationship between self-blame and peer victimization as measured by all three informants.

Conclusion: These findings highlight the importance of considering post-traumatic stress symptoms and self-blame in interventions for children victims of sexual abuse. Strength-based interventions aiming to promote adaptive behaviors and a systemic approach could target and prevent further victimization, therefore fostering resilience among this vulnerable population of children.

Acknowledgements:

The authors would like to thank the families who participated in this study and members of the participating agencies. Our thanks are also extended to Manon Robichaud for database management.

Funding:

This research was supported by a grant from the Canadian Institutes of Health Research (# 77614) awarded to Martine Hébert.

Conflicts of Interest:

We have no conflicts of interest to declare.

Keywords:

child sexual abuse, peer victimization, self-blame, post-traumatic stress symptoms, revictimization.

Introduction

Child sexual abuse (CSA) is a serious public health issue. It is estimated that one in five girls and one in ten boys have been victims of CSA before the age of 18 (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). CSA is associated with a host of deleterious consequences including internalized and externalized behavior problems (Lewis, McElroy, Harlaar, & Runyan, 2016) as well as post-traumatic stress disorder (PTSD; Hébert, Langevin, & Daigneault, 2016). CSA can also impact school adaptation and social relationships of child victims. For example, parents and teachers report lower social skills and more social difficulties in CSA victims when compared to non-abused peers (Blanchard-Dallaire & Hébert, 2014).

Peer victimization

Difficulties experienced in the school context may also translate into heightened risk of peer victimization for these vulnerable youths. The few available studies—focusing for the vast majority on adolescent samples—suggest that child maltreatment is associated with a higher risk of peer victimization (Auslander, Tlapek, Threlfall, Edmond, & Dunn, 2015; Benedini, Fagan, & Gibson, 2016). Yet, little is known about peer victimization specifically among children victims of CSA. One recent study found that 60% of sexually abused children reported experiencing at least one episode of school-based peer victimization (Hébert et al., 2016). In their study conducted with a Canadian community sample of children aged 6–12, Babchishin and Romano (2014) found that 95% of children who experienced any form of sexual victimization were also victimized by peers or siblings.

According to Olweus (2010), peer victimization is defined as being the target of intentional, repetitive and negative (hurtful or unpleasant) behavior by one or more person. Typically, these behaviors can be expressed either directly or indirectly (Shetgiri, 2013). Direct aggression includes physical violence (hitting, pushing, etc.), as well as verbal abuse, such as insults and threats. Indirect behavior refers to relational aggression that is characterized by the manipulation of social relationships or damage to reputation, such as rumors and exclusion. Like CSA, peer victimization is associated with negative outcomes that can persist into adolescence and adulthood, such as depression, anxiety and behavior problems (McDougall & Vaillancourt, 2015; Singham, Viding, Schoeler, Arseneault, & Ronald, 2017). One of the rare studies examining the co-occurrence of child maltreatment (sexual, physical and psychological abuse) and peer victimization found that participants who experienced both maltreatment and peer victimization displayed more psychological distress and post-traumatic stress symptoms (PTSS) than those who sustained only one type of victimization (Duncan, 1999). According to the author, these results suggest that individuals victimized in different contexts have fewer opportunities to escape maltreatment. Studies also suggest that relational victimization, such as ignoring, rejecting or spreading rumors, predicts psychological distress, beyond childhood maltreatment, in adults (Sansen, Iffland, & Neuner, 2014).

Moreover, several researchers have observed that experiencing multiple forms of violence during childhood has a cumulative effect on adult psychopathology (Putnam, Harris, & Putnam, 2013). Overall, children who experience any type of victimization in a given year are two to seven times more likely to be revictimized the following year (Finkelhor, Ormrod, & Turner, 2007). Revictimization of CSA victims, including peer victimization, is therefore a worrying issue considering the impact it can have on the development and mental health of children. However, factors influencing the risk of revictimization of CSA victims are not yet fully understood.

Factors influencing revictimization

Available literature on victimization experienced in the school context is very scarce. In order to design efficient interventions and foster resilience among CSA victims, it is important to better understand the factors contributing to their vulnerability towards other forms of violence. Examining factors that affect the risk of revictimization might not only ultimately minimize its occurrence, through targeted interventions, but could also prevent the onset of a more severe sequelae in victims. The present study will focus on addressing blame attributions related to the CSA and PTSS as potential factors influencing the risk of peer victimization among CSA victims.

CSA-specific self-blame. Among the various factors influencing the risk of revictimization, several researchers focused on the internal attributions of blame specific to CSA. Causal attribution refers to an individual's inference about the cause of an event (Abramson, Seligman, & Teasdale, 1978). Thus, according to this theory, an internal attribution corresponds to the belief that characteristics or behaviors specific to the individual have caused the event. Conversely, external attributions assign responsibility for

the event to someone or something else. For example, following sexual abuse, the child may blame himself/herself (internal attribution) or may believe that the fault rests more with the aggressor or the situation (external attribution). Attributions vary according to age, across contexts (Valle & Silovsky, 2002) and also with the time elapsed since the disclosure of the abuse (Feiring & Cleland, 2007). This underscores the importance of examining these attributions in a prospective manner, rather than retrospectively.

Blame attributions are perceived as factors that influence the relationship between CSA and psychological symptoms. For example, blame attributions have been found to predict depressive, anxiety, dissociative symptoms and low self-esteem among children and adolescents with CSA histories (Daigneault, Tourigny, & Hébert, 2006; Gauthier-Duchesne, Hébert, & Daspe, 2017). CSA-specific self-blame has also been identified as a salient risk factor for revictimization. For example, Arata (2000) found that SA-specific self-blame acted as a mediator between CSA and sexual victimization in adulthood. Results showed that severity of the perpetrated acts was associated with higher levels of self-blame, which were in turn related to an increased risk of sexual victimization in adulthood. Even though these studies shed light into the relationship between blame attributions and revictimization in adults, to our knowledge, no study has focused on specific attributions to the CSA in relation to interpersonal violence in a school context.

Post-traumatic stress symptoms. CSA-specific self-blame is associated with greater impairment in CSA victims (Valle & Silovsky, 2002); impairment that often translates into post-traumatic stress symptoms (PTSS; Cantón-Cortés, Cantón, & Cortés, 2012; Sharma-Patel et al., 2014). Specifically, PTSS have often been identified as risk factors for adult sexual victimization in women (Filipas & Ullman, 2006; Fortier et al., 2009). Again, knowledge about the relationship between PTSS and subsequent victimization of CSA victims comes mainly from the literature on sexual re-victimization of adult women.

With respect to peer victimization in children, one study found that PTSS triggered by Hurricane Katrina in Louisiana predicted increased peer victimization in schools (Terranova, Boxer, & Morris, 2009). Another study using a sample of adolescent girls in the child welfare system revealed that youth with more PTSS were at greater risk of being victimized by peers, even after controlling for the traumatic event experienced (Auslander et al., 2015). The results of this study also found that PTSS mediated the relationship between the severity of CSA and the physical, relational, and verbal victimization perpetrated by a peer (Auslander et al., 2015), suggesting that PTSS act as a mechanism towards being victimized by their peers. Some authors have argued that PTSS may alter information processing skills, risk perception and self-protection strategies, thus possibly increasing vulnerability to further victimization (Chu, 1992; Arata, 2000). For example, hyperarousal was found to mediate the relationship between CSA and sexual revictimization in a sample of adults (Risser, Hetzel-Riggin, Thomsen, & McCanne, 2006). Hyperarousal could reduce one's ability to distinguish real threats from safe situations, which could translate into a lowered vigilance towards signs of potentially dangerous situations, hence increasing the vulnerability to revictimization.

The current study

Against this backdrop, this study will address some of the gaps in the current literature. Rather than studying the phenomenon retrospectively with adult participants, it will focus on a sample of child victims of CSA. Moreover, a multi-informant measure will be used to obtain a more accurate and comprehensive assessment of peer victimization. Several studies have shown a differential report of peer victimization between the child, parent and the teacher, although the teacher report was less frequently considered in past studies (Harper, 2012; Hébert et al., 2016; Ronning et al., 2009). Social bias, such as emotion recognition and subjectivity bias, may also interfere with the informant's reporting style of peer victimization (John & DiLalla, 2013; Ladd & Kochenderfer-Ladd, 2002). Additionally, Ladd and Kochenderfer-Ladd (2002) found that their cross-informant measure better predicted relational adjustment than any of the single-informant measure. Hence, using a cross-informant measure can more accurately depict the scope of the situation and enhance validity.

The study's first aim is to contrast the three informants' (child, parent, and teacher) reports of peer victimization. The second objective of this study is to determine whether CSA-specific self-blame and PTSS predict peer victimization in CSA victims. Lastly, this study will test the mediating role of PTSS in the relationship between CSA-specific self-blame and the severity of peer victimization. It is expected that higher levels of self-blame and PTSS will be associated with more severe peer victimization, and that PTSS will contribute to the relationship between self-blame and victimization through a mediation process.

Methods

Procedure

This study is part of a larger project on the developmental trajectories of CSA victims. The children and their non-offending parent were recruited from five centers offering specialized services for sexually abused children and their families in the province of Quebec, Canada. Research assistants administered the questionnaires separately to children and parental figures during the initial assessment. After obtaining the parent's consent, teachers were invited to complete a questionnaire on the behaviors and attitudes of the child at school. This research project was approved by the ethics committees of the CHU Sainte-Justine and of the Université du Québec à Montréal.

Participants

Of the original sample of 376 participants, 24 participants were excluded because of insufficient data on one or more of the instruments used, with the exception of the teacher's evaluation of peer victimization. This led to a final sample of 352 sexually abused children (232 girls and 120 boys) aged 5–14 years old ($M = 9.03$, $SD = 2.13$). Socio-demographic characteristics of the sample are summarized in Table 1. The majority (72.8%) of cases involved CSA perpetrated by a family member. Characteristics of the abuse are described in Table 2.

Table 1: Sample Characteristics

Variable	Total (n = 352)
Mean age of children	9.03 (2.13)
Gender of Children	
Girls	65.9%
Boys	34.1%
Ethnicity	
Caucasian	98.3%
Other	1.7%
Family Structure	
Intact	21.9%
Single Parent	33.5%
Step Family	31.2%
Foster Family	13.4%
Annual Income	
Less than \$20,000	28.0%
\$20,000 - \$39,999	22.3%
\$40,000 - \$59,999	19.8%
\$60,000 and above	29.9%
Respondent's Education Level	
Primary School	3.5%
High School	39.5%
College	37.5%
University	19.5%

Table 2: Sexual Abuse Characteristics

Variable	Total (n = 352) ^a
Duration of the Abuse	
Single Episode	28.1%
Some Events	34.1%
Repetitive or Chronic	37.8%
Relationship with the Abuser	
Intra-familial	72.8%
Extra-familial	27.2%
Severity of the Abuse	
Less Severe	8.8%
Severe	30.9%
Very Severe	60.3%

Note. The severity of the CSA experience was coded as such: 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).

^aBecause of missing data on some variables, number of participants ranges from 317 and 352.

Measures

Peer victimization. Peer victimization was assessed with a multi-informant measure. The Self-Report Victimization Scale (Ladd & Kochenderfer-Ladd, 2002), completed by the child, consists of four items assessing physical, verbal and indirect violence experienced in the school context. The Parent-Report Victimization Scale and Teacher-Report Victimization Scale (Ladd & Kochenderfer-Ladd, 2002) were completed by the parent and the teacher respectively and comprised the same items as the self-reported instrument and an additional one (“the child is teased or laughed at by other children”). The instrument assesses the frequency of victimization on a three-point scale ranging from 1 “never/seldom” to 3 “a lot/often” and provides an average total score. A higher score indicates a more frequent peer victimization. All versions showed satisfactory internal consistency in this sample (child’s : $\alpha = .77$; parent’s : $\alpha = .86$; teacher’s: $\alpha = .85$).

CSA-specific self-blame. Children answered to three items from the Children’s Impact of Traumatic Events Scale II (CITES II; Wolfe, 2002) concerning their levels of self-blame towards the CSA. The statements are: “I thought that what happened was my fault”, “I felt that I caused problems to several people” and “I felt guilty about what happened”. Items are scored on a three-point scale ranging from 0 (false) to 2 (very true) to provide a score of 0 to 6 for the full scale. The scale has good internal consistency ($\alpha = .80$) for this sample.

Post-traumatic stress symptoms. PTSS were measured using the 46 items of the PTSD subscale of the CITES II (Wolfe, 2002). This instrument assesses the severity of post-traumatic stress symptoms in response to sexual abuse in three categories of symptoms: hyperarousal (e.g. sleep difficulties), avoidance behaviors (e.g. situations related to the traumatic event, social withdrawal) and re-experience (e.g. nightmares, flashbacks). The child reports his answer on a three-point scale, ranging from 0 (false) to 2 (very true). The final score ranges from 0 to 92, with a higher score representing more traumatic symptoms. The internal consistency for this sample is excellent ($\alpha = .94$).

Socio-demographic and abuse characteristics. The information regarding socio-demographics was obtained by means of a self-report questionnaire completed by the non-offending parent. CSA characteristics were compiled by a clinician using an adapted version (Parent & Hébert, 2000) of the History of Victimization Form (Wolfe et al., 1987).

Results

Results will be discussed in three sections. First, descriptive statistics will be presented and will address the first aim of the study. Analyses relative to the second and last objectives will be presented next.

Descriptive statistics

Correlations in Table 3 show that PTSS scores are positively associated with peer victimization, as evaluated by the child and parent. Both the child's and the parent's evaluation of the child's victimization are significantly correlated with levels of self-blame. Significant, yet low correlations (from $r = .13$ to $.31$, $p < .05$) were found between the three informants' evaluations of peer victimization. Mean scores of victimization are as follows: $M = 1.66$ ($SD = .59$) for the child version, $M = 1.48$ ($SD = .52$) for the parent version, and $M = 1.28$ ($SD = .41$) for the teacher. Three quarters of children (76.4%) endorsed a frequency of "sometimes" or "often" on at least one type of peer victimization. As for the parent's and the teacher's evaluations, respectively 66.5% and 45.2% of children experienced some kind of peer victimization. More than half of participants reach clinical levels of PTSS (54.1%) and 59.4% of children endorsed at least one item of self-blame.

Table 3: Summary of Correlations, Means and Standard Deviations of the Studied Variables

Variables	1.	2.	3.	4.	M	SD
1. Self-blame (0 - 6)					1.91	2.10
2. Post-traumatic stress symptoms (0 - 92)	.55**				41.93	20.39
3. Peer victimization (child's evaluation: 1 - 3)	.28**	.41**			1.66	.59
4. Peer victimization (parent's evaluation: 1 - 3)	.17**	.19**	.31**		1.48	.52
5. Peer victimization (teacher's evaluation: 1 - 3)	-.01	.05	.13*	.27**	1.28	.41

Note. * $p < .05$; ** $p < .01$

Logistic regressions

In order to address this study's second objective, which consists of determining whether self-blame and PTSS were associated to peer victimization in the school context, logistic regressions were carried independently for each of the three informants' evaluation. For these analyses, the measure of peer victimization was dichotomized to indicate presence (1) or absence (0) of peer victimization. As suggested by Ladd and Kochenderfer-Ladd (2002), scores superior to one standard deviation or more above the mean were classified into the peer victimization group. A first logistic regression was performed with self-reported peer victimization as the dependent variable and self-blame and PTSS were included in the same block. The results indicated that the model was significant ($\chi^2(2) = 51.08, p < .01$). Nagelkerke's R^2 indicated that the model accounted for 21.9% of the variance of self-reported peer victimization. Only PTSS significantly predicted peer victimization ($\text{Exp}(B) = 1.05, p < .01$).

A second logistic regression was carried with parents' evaluation of victimization as the dependent variable. The model was significant ($\chi^2(2) = 8.37, p < .05$), but only accounted for 5% of the total variance. Only self-blame was significantly associated with peer victimization evaluated by the parent ($\text{Exp}(B) = 1.23, p < .05$). A third logistic regression showed that neither self-blame, nor PTSS contributed to predicting the risk of peer victimization evaluated by the teacher ($\chi^2(2) = 3.56, ns$).

Structural model

In order to determine whether PTSS mediated the relationship between self-blame and peer victimization, the three informants' evaluations of peer victimization were grouped in a latent variable within a structural model. This model was tested using Mplus 8 software (Muthén & Muthén, 1998-2017). As all three evaluations of peer victimization were characterized by a floor effect, data were analyzed using censored variables and MLR estimator.

Prior to testing the structural equation model, a confirmatory factor analysis was performed to verify if the three measures of peer victimization were consistent with the latent variable of global victimization. All three indicators were positively related to the latent variable ($\beta = .82; \beta = .43; \beta = .42, ps < .05$, for the parent's, child's and teacher's evaluation, respectively). However, as goodness of fit indices are not given when censored variables are used, the confirmatory factor analysis was re-run, while using the MLR estimator, but without the censored variables. New standardized coefficients were as follows: $\beta = .79, p < .05$ for the parent's evaluation, $\beta = .39, p < .05$ for the child's, and $\beta = .34, p < .05$ for the teacher's. These new coefficients were relatively similar to the ones obtained with the corrected variables and still reached significance. Therefore, all remaining analyses were carried using the MLR estimator, without correcting for the floor effect with the censored variables. Indices of fit for the latent variable were not examined, since the model was saturated.

The paths linking the latent variable and the observed variables were examined to assess the mediating role of the PTSS. More precisely, self-attributions of blame were included in

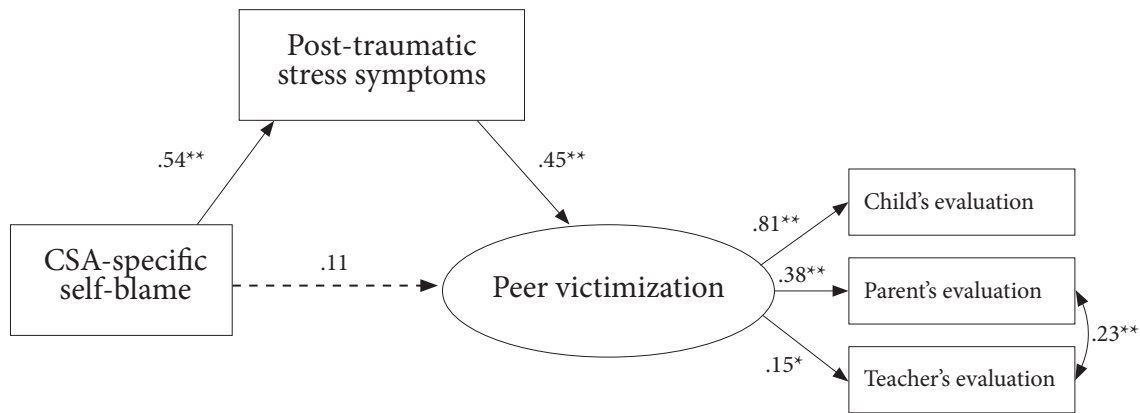


Figure 1: Final model of the relationship between self-attributions of blame, post-traumatic stress symptoms and peer victimization evaluated by three informants.

Rectangles indicate measured variables and the circle represents a latent variable. * $p < .05$; ** $p < .01$

the model as the independent variable, PTSS as the mediator and the latent variable of global peer victimization as the dependent variable. First, the direct effect, between self-blame and peer victimization, was tested. Results revealed that self-blame was positively associated to peer victimization ($\beta = .36, p < .01$).

Then, the mediator was included in the model and links between self-blame and PTSS, and PTSS and peer victimization were tested in a second analysis. Self-blame and PTSS were positively associated ($\beta = .54, p < .01$), and PTSS were in turn associated with global peer victimization ($\beta = .46, p < .01$). When PTSS were included in the model as a mediator, the direct effect between self-blame and peer victimization became non-significant ($\beta = .11, ns$). The indices showed an adequate fit (Santorra-Bentley $\chi^2(4) = 13.23, p < .05$; RMSEA = .08 [.04; .13]; CFI = .96; SRMR = .05), but the significant chi-square indicated that the model could, however, be improved. Thus, correlated error term for parent's and teacher's evaluation of peer victimization was added to the model ($\beta = .23, p < .01$).

The final model (Figure 1) showed an excellent fit (Santorra-Bentley $\chi^2(3) = 2.64, ns$; RMSEA = .00 [.00 ; .09]; CFI = 1.00; SRMR = .02). A Sobel test confirmed that PTSS mediated the relationship between self-blame attributions and peer victimization in the school context in CSA victims ($z = 3.82, p < .01$). In other words, greater self-blame was associated with more PTSS. PTSS were, in turn, associated with more frequent peer victimization. This model accounts for 26.6% of the total variance of peer victimization.

Discussion

The purpose of this study was to investigate the association between self-blame, PTSS and peer victimization among child victims of sexual abuse. Results will help better understand potential risk factors of revictimization, thus providing intervention targets to foster resilience in CSA victims. The preliminary analyses found that assessments of the

three informants do not capture the same scope of child victimization. Indeed, the agreement between the parent and the child's evaluations is moderate, while the agreement between the parent and the teacher, as well as the concordance between the child and the teacher are low. This overall low agreement between the informants confirms the trend that is often found across studies, even when different instruments are used to assess peer victimization (Harper, 2012; Holt, Kantor, & Finkelhor, 2009). Ladd and Kochenderfer-Ladd (2002) posited that the parent/child agreement tends to be stronger than the two other combinations because the parent's perception is mostly drawn from the child's recounts. As most peer victimization acts are perpetrated in situations where adult supervision is minimal (Smokowski & Kopasz, 2005), it is not surprising to observe a lower rate of peer victimization when reports are based on teachers' evaluation.

The second objective sought to examine the association between CSA-specific self-blame and PTSS, and each of the three victimization measures. Results revealed that only PTSS were associated with self-reported peer victimization, meaning that more PTSS was linked to an increased risk of being victimized by peers in the school context. With respect to the measure completed by the parent, CSA-specific self-blame, but not PTSS, was associated with victimization; with greater self-blame being related to an increased risk of being victimized in the school context as reported by parents. Analysis failed to identify significant predictors of teachers' report of peer victimization.

These findings suggest that different processes may come into play in the way informants report peer victimization. First, the relationship between PTSS and victimization reported by the child may be due to the fact that PTSS, particularly hyperarousal, leads to exaggerated reactions to minimal threats (Cloitre & Rosenberg, 2006). This hypersensitivity could artificially inflate the child's reports of peer victimization. This would explain, both why children report more victimization experiences than parents and teachers, and why only the self-reported victimization measure is associated with PTSS. Another explanation might be that children with more severe PTSS tend to avoid discussing their negative interpersonal experiences with their parents. They could be so overwhelmed by these symptoms that they would not be able to verbalize their experiences of victimization to their parents, preventing them from attesting to the phenomenon.

The results also suggest that CSA-specific self-blame is associated with peer victimization perceived by the parent. The child may internalize the idea that he or she is responsible for the CSA, which can lead to a sense of helplessness (Abramson et al., 1978). This helplessness can then translate into decreased defense capabilities, less self-assertion and thereby continuity of victimization. However, it is unclear why no relationship was found between self-blame and self-reported victimization. It could be that children having high levels of self-blame are less likely to perceive themselves as victims. In fact, they may also have a general tendency to attribute the cause of negative events (i.e. peer victimization experiences) to themselves, thus feeling helpless and thinking that nothing can be done to change the situation. They may come to tolerate violence and no longer recognize it. Failure to identify significant predictors of teachers' report of peer victimization may be related to lack of statistical power (King & Zeng, 2001) as only a small proportion of children ($n = 9$) fell in the victimization group based on teachers' reports.

The final objective was to examine the contribution of PTSS in the relationship between CSA-specific self-blame and victimization, evaluated by the three informants all at once. Confirmatory factor analysis determined that the assessments of the different informants could be combined to form a more comprehensive measure of global peer victimization. The results of the structural model then revealed that PTSS completely mediated the association between self-blame and the severity of peer victimization in the school context. Thus, greater self-blame was associated with more severe PTSS symptoms, which in turn were associated with greater peer victimization.

This study replicated the results of several other studies concerning the association between self-blame and PTSS. Sharma-Patel and her colleagues (2014) hypothesized that self-blame could result in an altered self-image (e.g. lack of confidence in one's abilities) that would translate into a constant impression of threat or danger, which characterizes PTSD. Another explanation might be that victims displaying higher levels of self-blame tend to engage more in avoidant coping, thus increasing PTSS severity (Cantón-Cortés, Cantón, Justicia, & Cortés, 2011). This strong association between self-blame and PTSS underscores the importance of including feelings of blame as a type of negative thought or feeling in the upgraded diagnosis criteria for PTSD in the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM—5; American Psychiatric Association, 2013).

The fact that more PTSS were found to be associated with more severe peer victimization is consistent with the few studies of victims of traumatic events (Auslander et al., 2015; Terranova et al., 2009). To our knowledge, this is the first study that has examined this link with child victims of SA. The association between PTSS and peer victimization found in this study is also consistent with several models attempting to explain why CSA victims are at greater risk of further victimization in adolescence or adulthood. Indeed, PTSS have been identified as risk factors for teen dating victimization (Hébert, Daspe, Blais, & Lavoie, 2017) and sexual revictimization in adulthood (Arata et al. 2000; Fortier et al., 2009). It has been suggested that PTSS, namely hyperarousal, reduces an individual's ability to adequately assess hazards and threats, putting them at risk of being exposed to potentially dangerous situations (Risser et al., 2006). Although this explanation has mainly been used to explain revictimization in adult women, it appears applicable to peer victimization. For example, more PTSS may hinder the child from assessing potentially dodgy situations in school settings, and exert protective strategies preventing them from being bullied. Others suggest that it is not the perception of danger per se that is hindered by arousal symptoms, but the person's ability to efficiently react to the threat; overarousal could lead to immobilization when confronted to danger, whereas underarousal could result in impaired capacity to engage in self-protective strategies (Noll and Grych, 2011). It might also be that CSA victims are more vulnerable targets for bullies. They may internalize the fact that they are to blame for negative events and that they deserve it, therefore precluding them from asserting themselves or soliciting help to put an end to their victimization. In addition, sense of powerlessness often experienced by CSA victims may make it difficult to disclose peer victimization experiences to adults and seek support.

Limitations

The unique contribution of this paper should be interpreted in light of several limitations. The main limit is the reliance on a cross-sectional design. Hence, no inferences can be drawn concerning directionality of the relationship between the studied variables. A longitudinal design would allow a better understanding of the temporality of the variables. Secondly, the instruments used to measure CSA-specific self-blame and peer victimization included few items. Although using a multi-informant measure to assess peer victimization is a strength, the measures used focused only on situations experienced in the school context. School-aged children are often involved in sport or community activities, and victimization may also occur outside the school setting (Turner, Finkelhor, Hamby, Shattuck, & Ormrod, 2011). It should also be noted that this sample involved child victims of severe sexual abuse, which may be more prone to negative self-blame attributions and complex trauma symptoms.

Future studies

Future studies should disentangle the different dimensions of PTSD (hyperarousal, re-experiencing, and avoidance) that might be associated with peer victimization. This would lead to a better comprehension of the specific mechanisms involved. Similarly, studying the types of victimization distinctly (i.e. physical, verbal and relational), rather than globally, would clarify the situations in which CSA victims are at risk. Since CSA-specific self-blame seems to impact the general tendency to blame oneself for the occurrence of negative events (Daigneault et al., 2006), it would be interesting to study how CSA-specific self-blame and general internal attributions interact with one another in the prediction of peer victimization.

Implications

Despite these limitations, the findings suggest important clinical implications. The results help identify the factors related to revictimization, provide treatment targets and guide victimization prevention efforts in the school context. PTSS and self-blame are already important targets in the treatment of sexual abuse victims, including Trauma-Focused Cognitive-Behavioral Therapy (Cohen, Mannarino, & Deblinger, 2006), and this study further emphasizes the importance of focusing on these symptoms in order to prevent peer revictimization. In addition, it appears essential that practitioners investigate children's experiences of peer victimization in order to guide treatment planning, especially in children with severe self-blame and PTSS. Moreover, attributing the blame of the abuse to an external source (perpetrator or situation) is frequently identified as a protective factor (Domhardt, Münzer, Fegert, & Goldbeck, 2015). Assessing and addressing the negative self-cognitions and feelings related to the SA could promote resilience in the sense that less self-blame is associated with fewer post-traumatic symptoms and less peer victimization.

Interventions and programs targeting peer victimization in school settings would benefit from relying on a systemic and multimodal approach. As such, considering factors at different levels of the ecosystemic model when designing new interventions or programs is more likely to foster resilience. Individual factors, such as assertiveness and external attributions to negative events may constitute important targets in order to maximize

resilience, especially for vulnerable children (i.e. children with a known history of adversity). For example, interventions may need to provide the children tools to accurately recognize and respond to potentially dangerous situations, and helping them become more assertive. Moreover, it seems paramount to extend the intervention to other levels of the ecological system, by including parents, school personnel and even community organizations, so that external resilience factors are also promoted. In fact, working with parents to favor an “open” dialogue with their child, and offering school personnel the tools to adequately intervene if a child discloses a situation of peer victimization or sexual abuse could enhance social support and foster resilience. Moreover, child sexual abuse prevention programs that are disseminated in schools should convey and emphasize that children are never to blame for the abuse. An effort to adopt a more systemic approach (i.e. including parents, school personnel) could help reinforce this message, hence minimizing the risk that the child endorses self-blame.

In conclusion, the results of this study indicate that different psychological processes come into play depending on the perspective of the informant assessing peer victimization. In addition, PTSS mediates the link between self-blame and peer victimization in CSA victims. This study addressed some of the gaps in the literature by studying cross-informant peer victimization among a sample of child victims of sexual abuse. The fact that the different reports of victimization are associated with different mechanisms (self-blame and PTSS) further outlines the pertinence of using a multi-informant approach to peer victimization to gather a more comprehensive portrayal of the phenomenon. Although the study design does not allow for inference of temporality, the study did contribute to the understanding of mechanisms involved in peer revictimization in CSA victims. Hopefully, the results of this study will help to identify aspects relevant to the prevention of school-based victimization for vulnerable children.

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