Psychological Trauma: Theory, Research, Practice, and Policy
2018, Vol. 10, No. 4, 402–410

1942-9681/18/$12.00 http://dx.doi.org/10.1037/tra0000321

An Analysis of Avoidant and Approach Coping as Mediators of the Relationship Between Paternal and Maternal Attachment Security and Outcomes in Child Victims of Sexual Abuse

Martine Hébert and Marie-Ève Daspe
Université du Québec à Montréal

Mireille Cyr
Université de Montréal

Objective: Prior studies have documented the potential role of nonoffending parent support in promoting recovery of adult survivors following sexual abuse (SA). However, few studies have distinguished the maternal and paternal role and the mechanisms by which quality of the parent-child relationship might foster more positive outcomes in child victims. The purpose of this study was to examine coping strategies as mediators of the link between mother-child and father-child relationship and outcomes following child SA. ***Method:*** A sample of 505 children (339 girls and 166 boys) ages 6–13 years completed measures evaluating perceived attachment security to mother and father (Kerns Security Scale; Kerns, Klepac, & Cole, 1996), as well as coping strategies related to the SA experienced (Self-Reported Coping Scale; Causey & Dubow, 1992). Outcomes evaluated were posttraumatic stress symptoms (PSS; Children's Impact of Traumatic Events Scale—II [CITES-II]; Wolfe, 2002) and self-esteem (Harter, 1985). ***Results:*** Results indicated that, in girls, both attachment security to the mother and to the father are associated with lower PSS symptoms and higher self-esteem through a lesser use of avoidant coping. Avoidance coping mediated the link between attachment security to the mother and outcomes in boys. In addition, security in the relationship with the same-sex parent was associated with approach coping, which in turn was associated with both outcomes for girls and with PSS for boys. ***Conclusion:*** Findings highlight the importance of involving both parents in interventions for sexually abused children as mothers and fathers appear to play different, yet complementary roles in sustaining children's recovery.

Keywords: child sexual abuse, attachment security, posttraumatic stress symptoms, self-esteem, coping

Sexual abuse (SA) is associated with a host of negative outcomes. Children disclosing SA are described as having significant behavior problems compared with nonabused children (Wolfe, 2007) and compared with children suffering from other forms of maltreatment (Lewis, McElroy, Harlaar, & Runyan, 2016). Poor self-esteem as well as posttraumatic stress symptoms (PSS) including intrusive thoughts and flashbacks, avoidance, hyperarousal, and hypervigilance appear to be particularly present among children sustaining sexual violence (Kendall-Tackett, Williams, & Finkelhor, 1993; Runyon, Deblinger, & Steer, 2014) and may be more characteristic of girls victims of SA (Gauthier-Duchesne, Hébert, & Daspe, 2017).

Informed by different conceptual models, such as the multidimensional transactional model (Spaccarelli, 1994), a series of factors related to the characteristics of the abuse sustained (for instance, duration of the abuse, identity of the aggressor, severity of the acts involved), personal factors (attributions, coping), as well as familial variables, have been proposed as potential correlates explaining the vast diversity of profiles in sexually abused children (Yancey & Hansen, 2010). Research documenting the potential factors linked to outcomes—especially nonstatic factors—has the potential to offer relevant insight to better inform interventions with vulnerable children experiencing SA.

Nonoffending Parent Support

One of the most studied factors is nonoffending parent support, although it must be acknowledged that much of this previous research exclusively examines maternal support. Both clinicians and researchers have identified a supportive stance from the nonoffending parent as a potential factor promoting recovery following SA. Indeed, support from the nonoffending parent

This article was published Online First October 5, 2017.

Martine Hébert and Marie-Ève Daspe, Département de sexologie, Université du Québec à Montréal; Mireille Cyr, Département de psychologie, Université de Montréal.

Marie-Ève Daspe is now at Department of Psychology, University of Southern California.

This research was funded by grants from the Canadian Institutes of Health Research awarded to the first author (Grants 77614 and 235509). We thank the children and the parents who participated in the study. Our thanks are extended to our partners: members of the Clinique de pédiatrie sociojuridique of Sainte-Justine Mother and Child University Hospital Center, especially Ann-Claude Bernard-Bonnin and Claire Allard-Dansereau, the Centre d′Expertise Marie-Vincent, the Centre d′Intervention en Abus Sexuels pour la Famille, the Parents-Unis center, and the Centre Jeunesse de la Mauricie et du Centre-du-Québec.

Correspondence concerning this article should be addressed to Martine Hébert, Département de sexologie, Université du Québec à Montréal, Montréal (Québec), Canada H3C 3P8. E-mail: hebert.m@uqam.ca

may serve as a buffer against detrimental outcomes of SA (Elliott & Carnes, 2001; Lovett, 2004).

A number of studies have found—at least when exploring long term outcomes with adult samples—that parental support is associated with better outcomes and less psychological distress in survivors (Merrill, Thomsen, Sinclair, Gold, & Milner, 2001). However, empirical reports investigating the potential role of nonoffending parent support in predicting outcomes specifically with samples of children disclosing SA have given rise to inconsistent results (Bolen & Lamb, 2007). For instance, Spaccarelli and Kim (1995) reported that perceived support was the best predictor of victims' outcomes among all other considered variables. Children who felt supported by the nonoffending parent maintained a higher level of functioning in social, interpersonal, and academic domains. Zajac, Ralston, and Smith (2015) found that child and mothers' ratings of maternal support predicted children's outcomes postdisclosure as well as in a 9-month follow-up. However, with a sample of 123 sexually abused children, child's perceptions of parental support failed to discriminate subgroups of children displaying severe distress, from those showing mostly anxiety-related symptoms or those qualified as resilient (Hébert, Parent, Daignault, & Tourigny, 2006). Moreover, even maternal reports of support given have not been predictive of internalizing, externalizing behavior problems or dissociation symptoms in a sample of 150 sexually abused children aged 4–12 (Hébert, Collin-Vézina, Daigneault, Parent, & Tremblay, 2006). Accordingly, in a recent meta-analysis of 29 studies (Bolen & Gergely, 2015), nonoffending parent support was found to be only weakly associated with three (acting out, depression, and self-concept) out of 11 different measures of postdisclosure functioning in children. Several methodological issues related to the measurement of nonoffending parent support need to be considered including the diversity of assessment tools, a lack of consensus as to how to measure support, and the possible restricted range of nonoffending parent support in the samples evaluated. In addition, to this day, studies exploring the role of nonoffending parent support in outcomes of children reporting SA have relied on a global measure of support and have failed to differentiate between the maternal or paternal role, which might constitute an important factor in explaining the discrepancies and contradictory findings between studies.

Support Versus Quality of Parent-Child Attachment

Alternatively, Bolen and Lamb (2007) have suggested that the more stable construct of parent-child attachment security may be a more reliable predictor of sexually abused children's outcomes than postdisclosure nonoffending parent support. With a sample of 90 sexually abused children aged 7 to 13, Bolen and Lamb (2007) measured children's perceptions of the quality of the parent-child relationship as a proxy for parent-child attachment security using the Relatedness Scale (Lynch & Cicchetti, 1991, 1992). Results revealed that children reporting a more positive and approaching quality in the parent-child relationship reported fewer anger and total symptoms. Children reporting a more maladaptive need for psychological proximity to the parent obtained significantly greater total symptoms scores as well as greater anxiety, depression, and dissociation symptoms. Interestingly, children's reports of the quality of the parent-child relationship were associated with 83% of child-rated outcomes and 64% of parent-rated outcomes, while clinician's reports of parental support were related to only 17% of children-reported outcomes and 18% of parent-rated outcomes, namely, child's externalizing and delinquent behaviors. These findings led the authors to conclude that attachment may be a more valid predictor of sexually abused children's outcomes than parental support.

Father-Child Versus Mother-Child Attachment

We further argue the need to distinguish the possible role of the mother-child relationship from the father-child relationship. A body of research now clearly documents the distinctive role of fathers on children's development and social competence (Amato & Rivera, 1999; Paquette, 2004). The type of advice given by fathers predicts social competence over and above characteristics of advice provided by maternal figures (McDowell, Parke, & Wang, 2003). These differences may reflect different emotion regulation strategies offered by mothers and fathers, strategies that children may assimilate through modeling (Williams & Kelly, 2005). In the child SA literature, few studies have explored the potential role of the father-child relationship and the majority relied on adult samples (Guelzow, Cornett, & Dougherty, 2003; Lynskey & Fergusson, 1997; Merrill et al., 2001; Schreiber & Lyddon, 1998).

In one study conducted with a sample of 6–12-year-old sexually abused children, the child's perception of security of attachment to the mother (perception of the attachment figure as responsive and available, reliance on the parent in times of stress, ease and interest in communicating with the mother) was not related to security of attachment to the paternal figure, highlighting the need for evaluating the potential protective function of mother-child and father-child relationship distinctively. Perceptions of security of attachment to the father predicted higher self-esteem as well as lower child-reported behavior problems over and above perceived attachment security to the mother and abuse-related variables (type of abuse—intra or extrafamilial, duration and severity of the acts involved; Parent-Boursier & Hébert, 2010). Results regarding the specific and distinct contribution of paternal attachment security appear to be quite robust as it was also found in the prediction of parental reports of children's behavior problems (Parent-Boursier & Hébert, 2015). Yet, the mechanism by which attachment promotes recovery in victims of SA has yet to been explored.

Authors have argued that the father-child relationship is qualitatively different from the mother-child relationship (Ferreira et al., 2016; Lamb & Lewis, 2004; Paquette & Dumont, 2013). Typical fathers spend proportionally more time playing with their child than mothers do and these interactions may have a specific role in promoting the development of autonomy in the child and introducing the child to the outside world (Paquette, 2004). By means of father-child interactions, namely by play, fathers foster children's self-confidence, encourage them to learn to take chances, and to overcome limits, thus offering a host of opportunities for emotion regulation and development of coping skills (Dumont & Paquette, 2008). Coping refers to thoughts and behaviors individuals use to deal with the demands of stressful events or circumstances (Lazarus & Folkman, 1984). Several authors refer to two broad dimensions of coping: approach and avoidance coping. Approach coping refers to more actionable strategies, that is, behavioral, cognitive, or emotional activities aimed at altering the stressful situation. Avoidance coping imply more indirect responses or disengaged strat-

egies aimed at avoiding or distancing oneself from the stressor as well as managing its emotional impact (Causey & Dubow, 1992; Roecker, Dubow, & Donaldson, 1996; Sharma, Fine, Brennan, & Betancourt, 2017). Studies have generally found that approach coping (problem-solving, seeking social support, etc.) is related to more positive outcomes, whereas avoidance coping (distraction, etc.) is associated with a greater risk for poor adjustment (Boxer & Sloan-Power, 2013; Compas Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). One hypothesis is that mothers' actions following SA are focused on reducing the child's distress while fathers are more prone to encourage children to use approach coping strategies to confront the situation directly, strategies that may have a beneficial effect not only immediately following SA but also in the longer run. To our knowledge, only one study has examined the potential influence of the father-child relationship on coping in SA victims. With a sample of 188 undergraduate women including 44 victims of SA, Guelzow et al. (2003) found that paternal support had an indirect effect on self-worth through coping. Although this study examined paternal support and not specifically attachment to the father, the results suggest that a father's supportive stance can exert an influence on how adult victims cope with adverse life events, which, in turn, impacts on self-esteem and sense of self-worth. Taken as a whole, findings of previous research suggest that attachment to mother and father might both have a protective, but differential impact on coping and child adjustment following SA. However, this hypothesis has not yet been formally tested.

Overview of the Current Study

The aim of the current study is to examine coping strategies as mediators of the link between child's perceived attachment security to mother and father and outcomes following child SA. Fathers are the perpetrators in only a minority of cases based on incidence data from Quebec (14%; Tourigny et al., 2002), Canada (9%; Trocmé et al., 2005), or the United States (4%; Finkelhor, Hammer, & Sedlak, 2008). Therefore, in the majority of SA cases, the father may be called upon to play an important role in assisting the child's recovery. More specifically, the study aimed to examine avoidant and approach coping strategies as mediators of the relationships between maternal/paternal attachment security, PSS, and self-esteem in children victims of SA. We hypothesize that (a) security to father would be associated with lower PSS and higher self-esteem through a greater use of approach coping strategies, and that (b) security to mother would be linked to lower PSS and higher self-esteem through a lesser use of avoidant coping strategies. In addition to examining security to mother and father independently, we conducted separate models for girls and boys. However, given the lack of research addressing the contribution of children's sex on mother-child and father-child relationships following SA, this investigation was exploratory and no specific hypotheses were developed.

Method

Participants

The sample consists of 505 children (339 girls and 166 boys) that were recruited in five different sites offering services to sexually abused children in the province of Quebec, Canada. For the purpose of the study, children having been abused by one of their biological parents were excluded unless they reported having a substitutive parental figure (e.g., stepfather). In addition, only children that provided information on attachment to both parental figures (biological or surrogate parents) were included in the study. The sample was initially composed of 675 children. Among those, 170 (25%) were excluded because they did not provide data on either attachment security to father or attachment security to mother. Of the participants excluded, 42% had been abused by a biological parent. Among the 505 participants included in the present study, 8.3% had been abused by a biological parent but provided data on attachment security to a substitutive parental figure and were thus included in the analyses.

Age of the children ranged from 6 to 13 years with a mean of 8.98 (SD = 1.93) years for girls and 8.80 (SD = 1.98) years for boys. A proportion of 24.4% (n = 121) children lived with both of their parents, 30.2% (n = 150) were in single-parent families, 31.3% (n = 155) lived in stepfamilies, and 14.1% (n = 70) were in foster families or other settings, namely, members of the extended family, such as grandparents and aunts.

Measures

Sociodemographics. Parents were invited to complete a short questionnaire related to sociodemographic characteristics.

Perception of attachment security in mother-child and father-child relationship. An adaptation (Hébert, 2001) of the Kerns Security Scale (Kerns et al., 1996) was used to evaluate the perception of security of attachment to the mother and father. The variable refers to (a) the belief that the figure meets specific commitment and is available for the child, (b) the propensity of the child to use this figure in times of stress, and (c) the ease of communication with the parental figure. Each of the nine items is completed in reference first to the mother figure and then the father figure. Following Williams and Kelly (2005), an inclusive definition of the father (or the mother) was used and referred to the male (female) figure designated by the child as undertaking the paternal (maternal) role. In the current study, the scale shows an adequate internal consistency (α = .75 and .85 for attachment security to the mother and father, respectively).

Coping strategies. Children were administered the Self-Report Coping Scale (SRCS; Causey & Dubow, 1992). The SRCS evaluates coping strategies used by children when confronted to a stressor with a 5-point scale (from 1 = *never* to 5 = *always*). Approach (seeking social support and problem-solving) and avoidance strategies (distancing, internalizing, and externalizing) are considered in accordance with the conceptualization of Roth and Cohen (1986). A brief 20-item version of the SRCS was used. The brief version was derived from the original scale by retaining items showing the highest item-total correlations (Hébert, Parent, & Daignault, 2007). Analyses on the brief version of the SRCS revealed adequate internal consistency for each subscale (α ranging from .72 to .86) and a factorial structure similar to the original version (Hébert et al., 2007). In the present study, the stem was adapted so that the child answered items as to the frequency of strategies used to cope with the SA. Both subscale scores show adequate reliabilities (α = .80 for approach coping and α = .73 for avoidance coping).

PSS. PSS were measured using a scale derived from the CITES-II (Wolfe, 2002). The CITES-II is a revision of the CITES-R (Wolfe, Wolfe, Gentile, & LaRose, 1987). The scale was designed to cover all symptoms identified in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994) and covers typical reexperiencing symptoms (e.g., nightmares), avoidant behaviors (e.g., social withdrawal), and hyperarousal problems (e.g., difficulty sleeping). It consists of 46 items rated on a scale of 0 (*not true*) to 2 (*very true*) and higher scores correspond to greater PSS. Reliability and validity of the CITES-R are well established (Chaffin & Schultz, 2001; Wolfe, 1996) and the reliability of the CITES-II is satisfactory (Wolfe, 2007). The global score of the French version of the scale was found to be reliable in the current study ($\alpha = .93$).

Self-esteem. Self-esteem was assessed using the Global Self-Esteem subscale (6 items) of the Self-Perception Profile for Children (Harter, 1985). The child is asked first to evaluate which of two descriptions is most like him and then rates whether the description is *sort of true for me* or *really true for me*. Items are scored on a scale ranging from 1 to 4, with the highest scores corresponding to higher perceived competence. In the current study, internal consistency was found to be acceptable ($\alpha = .71$).

Procedure

The assessment was conducted at the intervention settings by research assistants who were graduate students in sexology and psychology and were trained in the administration and scoring of the instruments. Participants were informed that the purpose of the study was to document children's profiles, that participation in the study was voluntary, and that they could discontinue participation at any time. Both parent and child informed written consent were obtained, the human research review committee of the Centre hospitalier universitaire Sainte-Justine and the internal review board of the Université du Québec à Montréal approved the study.

Analytic Procedures

Descriptive and bivariate analyses were conducted using SPSS version 20. Sex differences on the study variables were examined through independent samples *t* test and correlations were conducted to explore the bivariate associations between attachment security in mother-child and father-child relationships, coping strategies, PSS, and self-esteem. To examine our mediation hypotheses, path analyses were conducted using Mplus Version 7.0 (Muthén & Muthén, 1998–2015). Models were estimated separately for boys and girls. Missing data were handled using the full information maximum likelihood, which estimates model parameters using all available raw data (Arbuckle, 1996). Various fit indices were used to ensure that the hypothesized models well represent the data. First, a nonsignificant *p* value for the chi-square statistic or a ratio of chi-square to degrees of freedom lower than 3 suggest no difference between the specified model and the observed variances and covariances (Byrne, 2012). Second, a comparative fit index (CFI; Bentler, 1990) of .90 indicates good fit (Bentler, 1992) and values above 0.95 indicate ideal fit (Hu & Bentler, 1999). Finally, a root-mean-square error of approximation (RMSEA; Browne & Cudeck, 1993) below .08, with a 90% confidence interval (CI) with an upper bound below .08 indicates adequate model fit. Because some variables were skewed, the robust maximum likelihood estimation was used to provide parameters that are adjusted for non-normality (Yuan & Bentler, 2000). Significance of indirect effects was examined using 95% bootstrap CIs (MacKinnon & Fairchild, 2009). This bias-corrected method is based on a distribution for the product of coefficients and generates confidence limits for the true value of coefficients for indirect effects. When zero is not in the CI, the indirect effect is considered significant. We also reported the proportion of the total effects of attachment security to father and mother that is mediated through coping strategies (indirect effect/total effect).

Results

Results will be presented in the following two subsections. First, descriptive data will present mean and standard deviations for study variables, followed by bivariate analyses. Finally, results of path analyses for boys and girls will be summarized.

Descriptive Data and Bivariate Analyses

Children reported very severe abuse (attempted penetration or penetration) in 63.4% of the cases, and the vast majority of cases (94.4%) involved men as perpetrators. A quarter of the sample (25.8%) reported a single episode, 37.9% reported a few episodes lasting less than 6 months, while 36.3% reported chronic abuse (i.e., lasting more that 6 months). Close to half (46.3%) of the cases involved abuse perpetrated by a member of the immediate family, while 24.8% of cases involved a member of the extended family, and 27.5% involved a known assailant. Only 1.4% of the cases were perpetrated by a stranger.

Means and standard deviations for the study variables are presented in Table 1. Data shows that, on average, children report a positive attachment security in relationship to father and mother. However, results suggest a higher security in relationship to mother than in relationship to father both for girls, $t(338) = 4.49$, $p < .001$, and boys, $t(165) = 2.22$, $p = .028$. Regarding sex differences on the study variables, results indicate marginally significant differences regarding security to father, $t(503) = -1.95$, $p = .052$, suggesting that boys report a slightly higher security in relationship to father than girls. A significant difference is also observed for PSS, indicating that girls report more PSS following SA in comparison with boys $t(483) = 5.04$, $p < .001$.

Correlation coefficients between study variables are presented in Table 1. For both boys and girls, results show positive associations between security in relationship to father and security in relationship to mother as well as between avoidant and approach coping strategies. Results also indicate a negative association between PSS and self-esteem. Although both avoidant and approach coping are linked to higher PSS, only avoidant coping is significantly associated with a lower self-esteem.

Specifically in girls, security to mother and father are negatively associated with avoidant coping and related to more positive outcomes (less PSS and higher self-esteem). In addition, security to mother is positively associated with approach coping. In boys, security to father is marginally positively correlated with approach coping while security to mother is marginally negatively associated with avoidant coping and positively associated with self-esteem. Security to mother is marginally associated with less PSS.

Table 1
Correlation Coefficients, Means, and Standard Deviations for Security to Father and Mother, Avoidance and Approach Coping, Posttraumatic Stress Symptoms, and Self-Esteem by Sex

Variables	1	2	3	4	5	6	Girls (n = 339) M (SD)	Boys (n = 166) M (SD)	Cohen's d
1. Security to father (9–36)		.37***	−.24***	.01	−.25***	.37***	28.31 (6.49)	29.51 (6.50)	.18
2. Security to mother (9–36)	.40***		−.22***	.16*	−.02**	.38***	29.92 (5.13)	30.61 (4.88)	.14
3. Avoidance coping (4–20)	−.10	−.15†		.40***	.56***	−.33***	10.19 (3.14)	9.86 (3.13)	.10
4. Approach coping (4–20)	.15†	.07	.45***		.31***	.10	12.98 (3.92)	13.04 (4.04)	.02
5. PSS (0–92)	.01	−.15†	.51***	.40***		−.34***	47.28 (17.93)	38.27 (19.76)	.48
6. Self-esteem (6–24)	.31***	.35***	−.30***	.02	−.29***		18.45 (4.09)	18.98 (3.98)	.13

Note. Coefficients for girls (n = 339) are presented above the diagonal and coefficients for boys (n = 166) are presented below the diagonal. PSS = posttraumatic stress symptoms.
† $p < .07$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Path Analyses

Results of path analyses for girls and boys are displayed in Figures 1 and 2, respectively. Both models show satisfactory fit indices ($\chi^2(1) = 0.98$, $p = .32$, $\chi^2/df = 0.98$, CFI = 1.00, RMSEA = .00 with 90% CI [.00, .14] for girls, and $\chi^2(2) = 0.30$, $p = .86$, $\chi^2/df = 0.15$, CFI = 1.00, RMSEA = .00 with 90% CI [.00, .08] for boys). We first hypothesized that security to father would be associated with lower PSS and higher self-esteem through a greater use of approach coping strategies. This hypothesis was partially confirmed. In girls, results suggest that security to father is not associated with approach coping. In boys, a significant indirect effect suggests that security to father is associated to PSS through the use of approach coping strategies (b = .11, 95% bootstrap CI [.02, .28]), although not in the expected direction. The proportion of the effect of security to father passing through approach coping is 33%. No indirect effect of security to father on self-esteem is observed in boys.

We next hypothesized that security to mother would be linked to lower PSS and higher self-esteem through a lesser use of avoidant coping strategies. This hypothesis was confirmed in both girls and boys. In girls, the proportion of the effect of security to mother on PSS (b = −.26, 95% bootstrap CI [−.46, −.09]) and self-esteem (b = .04, 95% bootstrap CI [.01, .08]) through a lesser use of avoidant coping strategies is, respectively, 54% and 17%. In boys, the indirect effect of security to mother on PSS (b = −.25, 95% bootstrap CI [−.56, −.03]) and self-esteem (b = .04, 95% bootstrap CI [.01, .09]) through a lesser use of avoidant coping strategies is, respectively, 31% and 16%.

Approach and avoidant coping also mediated several other associations between attachment security and the studied outcomes that were not initially hypothesized. In girls, security to father is associated with lower PSS (b = −.21, 95% bootstrap CI [−.35, −.06]) and higher self-esteem (b = .03, 95% bootstrap CI [.01, .06]) through a lesser use of avoidant coping strategies. The proportion of this effect on PSS and self-esteem going through avoidant coping is, respectively, 37% and 18%. In addition, security to mother is associated with higher PSS (b = .07, 95% bootstrap CI [.01, .18]) and higher self-esteem (b = .02, 95% bootstrap CI [.01, .05]) through approach coping strategies. The proportion of security to mother on PSS and self-esteem via

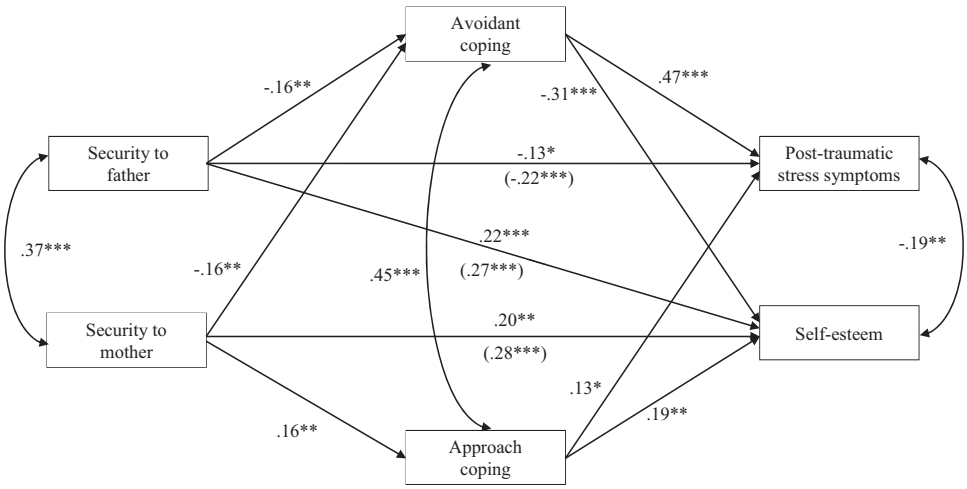

Figure 1. Associations between security to mother and father, avoidant and approach coping, posttraumatic stress symptoms, and self-esteem in girls (n = 339). Standardized regression coefficients. Coefficients in parentheses represent direct associations before the inclusion of the mediators in the model. Only significant associations are illustrated. * $p < .05$. ** $p < .01$. *** $p < .001$.

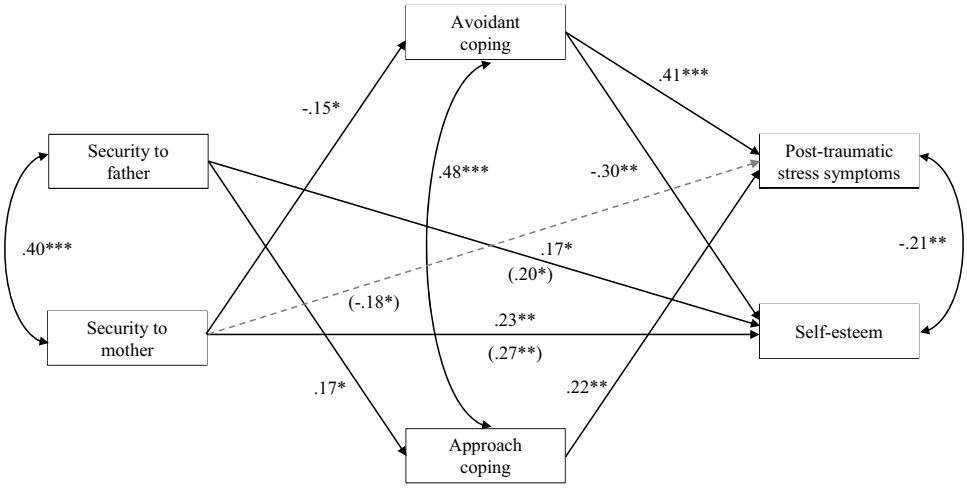

Figure 2. Associations between security to mother and father, avoidant and approach coping, posttraumatic stress symptoms, and self-esteem in boys ($n = 166$). Standardized regression coefficients. Coefficients in parentheses represent direct associations before the inclusion of the mediators in the model. Only significant associations are illustrated. * $p < .05$. ** $p < .01$. *** $p < .001$.

approach coping is, respectively, 15% and 11%. Moreover, direct associations between attachment security to father and mother and the studied outcomes were significant even after the inclusion of coping strategies to the models. In girls, attachment security to father is directly and negatively associated with PSS and directly and positively associated with self-esteem. Attachment security to mother also shows a positive, direct associated with self-esteem. In boys, both security to father and mother are directly and positively associated with self-esteem.

Altogether, security to father and mother as well as avoidant and approach coping contributes to explain 33.9% of the variance in PSS and 28.3% of the variance in self-esteem in girls. In boys, this model explained 32.1% of the variance in PSS as well as 22.2% of the variance in self-esteem.

Discussion

The aim of the current study was to examine coping strategies as mediators of the link between mother-child and father-child relationship and outcomes following child SA. Symptoms that are commonly associated with the aftermaths of SA were considered, namely, PSS and low self-esteem. Given possible differences in the father-child and mother-child relationship regarding the child's sex (Schoppe-Sullivan et al., 2006), a mediation model was conducted separately on girls and boys using path analysis. We hypothesized that security to father would be associated with a greater use of approach coping strategies, which, in turn, would be linked to less PSS and a higher self-esteem. We also hypothesized that security to mother would be associated with less avoidant coping strategies, which, in turn, would be linked to less PSS and a higher self-esteem.

Results of path analyses generally support the hypothesis of a beneficial impact of both security to mother and security to father on children's functioning and suggest a complex pattern of sex differences in parents and children. For both boys and girls, whereas security to the same-sex parent is associated with self-esteem, security to the opposite-sex parent is associated with both PSS and self-esteem. Sex differences are also found in the associations between attachment security and coping strategies. In girls, less avoidant coping is associated with both security to father and mother whereas, in boys, avoidant coping is only associated with security to mother. Interestingly, these findings underline the importance of opposite-sex parent-child relationships. Previous studies have reported a positive association between the quality of the mother-son relationship and child adjustment (Moilanen et al., 2010). In girls, it can be argued that, given that the great majority of SAs were perpetrated by men, it might be especially beneficial for them to feel secure in a relationship with someone who has the same sex as the perpetrator.

Our findings also suggest that, whereas approach coping is uniquely associated with security to mother in girls, in boys, approach coping is uniquely associated with security to father. These findings indicate that same-sex parent-child relationships also have positive impacts on children's adjustment following SA. Some authors (e.g., Feldman, 2003; Schoppe-Sullivan, 2006) suggest that same-sex parent–child dyads are a better match based on biological characteristics and their sharing of the same innate emotion regulation strategies. These similarities in functioning might promote the acquisition of approach coping from the same-sex parent and make children more prone to reach out to the same-sex parent for important issues. These observations support, on the one hand, the idea that mothers and fathers play different roles in the child's development (Dumont & Paquette, 2008; Lamb & Lewis, 2004; Paquette, 2004) and that, on the other hand, the related outcomes also depend on the child's sex.

Results indicate that associations between coping strategies and study outcomes are more similar for boys and girls. Avoidant coping is associated both with more PSS and with a lower self-esteem in boys and girls. Similarly, approach coping is related to more PSS in both girls and boys and associated with higher self-esteem in girls. The unexpected positive association between

approach coping and PSS is nevertheless in line with previous research. In a meta-analysis, Littleton, Horsley, John, and Nelson (2007) found a small but statistically significant positive association between approach coping and PSS. Similarly, Tiet et al. (2006) examined the longitudinal impact of coping strategies on functioning outcomes among posttraumatic stress disorder adult patients and found that approach coping was positively associated with better family and social functioning. Consistent with their hypothesis, they also observed that greater PSS were associated with more approach strategies because of the need to display more coping responses. The current results might reflect the fact that, in the short term, securely attached children who experience more PSS concurrently exhibit more approach coping in an attempt to deal with distress. Given that all families were seeking services, PSS may be "reactivated" and children may reexperience symptoms because they are engaging in the first step of processing the trauma. In the long run, approach coping might contribute to a reduction in PSS that cannot be observed using the current cross-sectional design. Future studies are needed to investigate this hypothesis.

The present study presents a number of strengths. First, the study relied on a large sample of sexually abused children, which contributes to the scarce literature on the possible mediators of outcomes in child victims of SA. Second, the study examined sex differences in the role of mother and father on coping strategies and SA outcomes by conducting a mediation model separately by sex. Another strength is the evaluation of coping strategies specific to SA, by opposition to a global evaluation of coping toward everyday, normative situations that might not accurately represent how the child specifically deals with this traumatic experience.

Our study has some limitations. All measures were completed by the child, thus shared-method variance might have led to an overestimation of the strength of the relationships examined. Our sample was restricted to families presenting for services, which limits the generalizability of our findings. Given the cross-sectional design of our data the temporal sequence of our mediational model cannot be ascertained. Future studies will benefit from relying on a longitudinal approach to explore whether perceived security to the mother and father figures is revealed to be a potent predictor of long-term outcomes in child victims of SA and to better delineate the interplay between attachment to maternal and paternal figures, coping, and PSS. The lack of pretrauma data regarding attachment security as well as PSS and self-esteem is another important limitation of the study, as our data does not enable us to conclude as to how these variables are impacted by SA. It is also possible that parental reaction to the trauma (for instance, believing the child, offering adequate support, etc.) impacts attachment security posttrauma and that changes in attachment security from pre- to posttrauma influence coping strategies. Future studies could also benefit from a refinement in the assessment of coping strategies by considering additional dimensions. For instance, subdividing approach and avoidance strategies into problem- or emotion-centered (Littleton et al., 2007) and including indicators of coping flexibility may offer a more detailed assessment of coping in children confronted with SA. Furthermore, the model should be tested with other outcomes including child-oriented symptoms, such as regressive behaviors, and developmentally salient consequences associated with SA. Despite these limitations, the present study offers some important findings attesting to the distinctive role of paternal figures in the recovery of young children experiencing SA.

In sum, children's outcomes following SA—by a perpetrator other than the father—were associated with attachment security to mother and father, through the use of adaptive coping strategies. Our results offer interesting cues for the design of interventions. Indeed, the data suggest that fathers may be called upon in service delivery to sexually abused children. While the majority of therapeutic interventions, including treatments identified as evidence-based interventions, favor mothers' involvement, only rarely are both parents actively involved. Yet involving both parents could enhance coping strategies and foster optimal recovery, given that mothers and fathers seem to play different, yet complementary, roles in promoting children's adjustment following SA. Moreover, the current findings suggest that security in relationship to the same-sex parent is uniquely associated with a greater use of approach strategy. This suggests that fathers' involvement might be particularly important in fostering their sons' ability to seek support and engage in problem-solving strategies to deal with the aftermath of SA.

References

Amato, P. R., & Rivera, F. (1999). Paternal involvement and children's behavior problems. *Journal of Marriage and the Family, 61,* 375–384. http://dx.doi.org/10.2307/353755

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Arbuckle, J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling* (pp. 243–277). Mahwah, NJ: Erlbaum.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107,* 238–246. http://dx.doi.org/10.1037/0033-2909.107.2.238

Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin, 112,* 400–404. http://dx.doi.org/10.1037/0033-2909.112.3.400

Bolen, R. M., & Gergely, K. B. (2015). A meta-analytic review of the relationship between nonoffending caregiver support and postdisclosure functioning in sexually abused children. *Trauma, Violence, & Abuse, 16,* 258–279. http://dx.doi.org/10.1177/1524838014526307

Bolen, R. M., & Lamb, J. L. (2007). Parental support and outcome in sexually abused children: Doubts cast upon its relationship. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 16,* 33–54. http://dx.doi.org/10.1300/J070v16n02_03

Boxer, P., & Sloan-Power, E. (2013). Coping with violence: A comprehensive framework and implications for understanding resilience. *Trauma, Violence, & Abuse, 14,* 209–221. http://dx.doi.org/10.1177/1524838013487806

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.

Byrne, B. M. (2012). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. New York, NY: Routledge.

Causey, D. L., & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology, 21,* 47–59. http://dx.doi.org/10.1207/s15374424jccp2101_8

Chaffin, M., & Shultz, S. K. (2001). Psychometric evaluation of the children's impact of traumatic events scale-revised. *Child Abuse & Neglect, 25,* 401–411. http://dx.doi.org/10.1016/S0145-2134(00)00257-X

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127,* 87–127. http://dx.doi.org/10.1037/0033-2909.127.1.87

Dumont, C., & Paquette, D. (2008). L'attachement père-enfant et l'engagement paternel: Deux concepts centraux pour mieux prédire le développement de l'enfant. *Revue de Psychoéducation, 37,* 27–46.

Elliott, A. N., & Carnes, C. N. (2001). Reactions of nonoffending parents to the sexual abuse of their child: A review of the literature. *Child Maltreatment, 6,* 314–331. http://dx.doi.org/10.1177/1077559501006004005

Feldman, R. (2003). Infant–mother and infant–father synchrony: The coregulation of positive arousal. *Infant Mental Health Journal, 24,* 1–23. http://dx.doi.org/10.1002/imhj.10041

Ferreira, T., Cadima, J., Matias, M., Vieira, J. M., Leal, T., & Matos, P. M. (2016). Preschool children's prosocial behavior: The role of mother-child, father-child and teacher-child relationships. *Journal of Child and Family Studies, 25,* 1829–1839. http://dx.doi.org/10.1007/s10826-016-0369-x

Finkelhor, D., Hammer, H., & Sedlak, A. J. (2008). *Sexually assaulted children: National estimates and characteristics* (Juvenile Justice Bulletin—NCJ214383; pp. 1–12). Washington, DC: Government Printing Office.

Gauthier-Duchesne, A., Hébert, M., & Daspe, M. È. (2017). Gender as a predictor of posttraumatic stress symptoms and externalizing behavior problems in sexually abused children. *Child Abuse & Neglect, 64,* 79–88. http://dx.doi.org/10.1016/j.chiabu.2016.12.008

Guelzow, J. W., Cornett, P. F., & Dougherty, T. M. (2003). Child sexual abuse victims' perception of paternal support as a significant predictor of coping style and global self-worth. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 11,* 53–72. http://dx.doi.org/10.1300/J070v11n04_04

Harter, S. (1985). *Manual for the Self-Perception Profile for children*. Denver, CO: University of Denver.

Hébert, M. (2001). *Traduction canadienne française du Security Scale de Kerns, Klepac, & Cole (1996)*. Unpublished manuscript, Université du Québec à Montréal, Montréal, QC, Canada.

Hébert, M., Collin-Vézina, D., Daigneault, I., Parent, N., & Tremblay, C. (2006). Factors linked to outcomes in sexually abused girls: A regression tree analysis. *Comprehensive Psychiatry, 47,* 443–455. http://dx.doi.org/10.1016/j.comppsych.2006.02.008

Hébert, M., Parent, N., & Daignault, I. V. (2007). The French-Canadian version of the Self-Report Coping Scale: Estimates of reliability, validity and development of a short form. *Measurement and Evaluation in Counseling and Development, 40,* 2–15.

Hébert, M., Parent, N., Daignault, I. V., & Tourigny, M. (2006). A typological analysis of behavioral profiles of sexually abused children. *Child Maltreatment, 11,* 203–216. http://dx.doi.org/10.1177/1077559506287866

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1–55. http://dx.doi.org/10.1080/10705519909540118

Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin, 113,* 164–180. http://dx.doi.org/10.1037/0033-2909.113.1.164

Kerns, K. A., Klepac, L., & Cole, A. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology, 32,* 457–466. http://dx.doi.org/10.1037/0012-1649.32.3.457

Lamb, M. E., & Lewis, C. (2004). The development and significance of father-child relationships in two-parent families. In M. E. Lamb (Ed.), *The role of the father in child development* (pp. 272–307). Hoboken, NJ: Wiley.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.

Lewis, T., McElroy, E., Harlaar, N., & Runyan, D. (2016). Does the impact of child sexual abuse differ from maltreated but non-sexually abused children? A prospective examination of the impact of child sexual abuse on internalizing and externalizing behavior problems. *Child Abuse & Neglect, 51,* 31–40. http://dx.doi.org/10.1016/j.chiabu.2015.11.016

Littleton, H., Horsley, S., John, S., & Nelson, D. V. (2007). Trauma coping strategies and psychological distress: A meta-analysis. *Journal of Traumatic Stress, 20,* 977–988. http://dx.doi.org/10.1002/jts.20276

Lovett, B. B. (2004). Child sexual abuse disclosure: Maternal response and other variables impacting the victim. *Child & Adolescent Social Work Journal, 21,* 355–371. http://dx.doi.org/10.1023/B:CASW.0000035221.78729.d6

Lynch, M., & Cicchetti, D. (1991). Patterns of relatedness in maltreated and nonmaltreated children: Connections among multiple representational models. *Development and Psychopathology, 3,* 207–226. http://dx.doi.org/10.1017/S0954579400000080

Lynch, M., & Cicchetti, D. (1992). Maltreated children's reports of relatedness to their teachers. *New Directions for Child Development, 1992,* 81–107. http://dx.doi.org/10.1002/cd.23219925707

Lynskey, M. T., & Fergusson, D. M. (1997). Factors protecting against the development of adjustment difficulties in young adults exposed to childhood sexual abuse. *Child Abuse & Neglect, 21,* 1177–1190. http://dx.doi.org/10.1016/S0145-2134(97)00093-8

MacKinnon, D. P., & Fairchild, A. J. (2009). Current directions in mediation analysis. *Current Directions in Psychological Science, 18,* 16–20. http://dx.doi.org/10.1111/j.1467-8721.2009.01598.x

McDowell, D. J., Parke, R. D., & Wang, S. J. (2003). Differences between mothers' and fathers' advice-giving style and content: Relations with social competence and psychological functioning in middle childhood. *Merrill-Palmer Quarterly, 49,* 55–76. http://dx.doi.org/10.1353/mpq.2003.0004

Merrill, L. L., Thomsen, C. J., Sinclair, B. B., Gold, S. R., & Milner, J. S. (2001). Predicting the impact of child sexual abuse on women: The role of abuse severity, parental support, and coping strategies. *Journal of Consulting and Clinical Psychology, 69,* 992–1006. http://dx.doi.org/10.1037/0022-006X.69.6.992

Moilanen, K. L., Shaw, D. S., & Fitzpatrick, A. (2010). Self-regulation in early adolescence: Relations with mother-son relationship quality and maternal regulatory support and antagonism. *Journal of Youth and Adolescence, 39,* 1357–1367. http://dx.doi.org/10.1007/s10964-009-9485-x

Muthén, L. K., & Muthén, B. O. (1998–2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Author.

Paquette, D. (2004). Theorizing the father-child relationship: Mechanisms and developmental outcomes. *Human Development, 47,* 193–219. http://dx.doi.org/10.1159/000078723

Paquette, D., & Dumont, C. (2013). The father-child activation relationship, sex differences, and attachment disorganization in toddlerhood. *Child Development Research, 2013,* 1–9. http://dx.doi.org/10.1155/2013/102860

Parent-Boursier, C., & Hébert, M. (2010). La perception de la relation père-enfant et l'adaptation des enfants suite au dévoilement d'une agression sexuelle. *Revue canadienne des sciences du comportement, 42,* 168–176. http://dx.doi.org/10.1037/a0017691

Parent-Boursier, C., & Hébert, M. (2015). Security in father-child relationship and behaviour problems in sexually abused children. *Journal of Family Violence, 30,* 113–122. http://dx.doi.org/10.1007/s10896-014-9653-y

Roecker, C. E., Dubow, E. F., & Donaldson, D. (1996). Cross-situational patterns in children's coping with observed interpersonal conflict. *Jour-*

nal of Clinical Child Psychology, 25, 288–299. http://dx.doi.org/10.1207/s15374424jccp2503_5

Roth, S., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist, 41,* 813–819. http://dx.doi.org/10.1037/0003-066X.41.7.813

Runyon, M. K., Deblinger, E., & Steer, R. A. (2014). PTSD symptom cluster profiles of youth who have experienced sexual or physical abuse. *Child Abuse & Neglect, 38,* 84–90. http://dx.doi.org/10.1016/j.chiabu.2013.08.015

Schoppe-Sullivan, S. J., Diener, M. L., Mangelsdorf, S. C., Brown, G. L., McHale, J. L., & Frosch, C. A. (2006). Attachment and sensitivity in family context: The roles of parent and infant gender. *Infant and Child Development, 15,* 367–385. http://dx.doi.org/10.1002/icd.449

Schreiber, R., & Lyddon, W. J. (1998). Parental bonding and current psychological functioning among childhood sexual abuse survivors. *Journal of Counseling Psychology, 45,* 358–362. http://dx.doi.org/10.1037/0022-0167.45.3.358

Sharma, M., Fine, S. L., Brennan, R. T., & Betancourt, T. S. (2017). Coping and mental health outcomes among Sierra Leonean war-affected youth: Results from a longitudinal study. *Development and Psychopathology, 29,* 11–23. http://dx.doi.org/10.1017/S0954579416001073

Spaccarelli, S. (1994). Stress, appraisal, and coping in child sexual abuse: A theoretical and empirical review. *Psychological Bulletin, 116,* 340–362. http://dx.doi.org/10.1037/0033-2909.116.2.340

Spaccarelli, S., & Kim, S. (1995). Resilience criteria and factors associated with resilience in sexually abused girls. *Child Abuse & Neglect, 19,* 1171–1182. http://dx.doi.org/10.1016/0145-2134(95)00077-L

Tiet, Q. Q., Rosen, C., Cavella, S., Moos, R. H., Finney, J. W., & Yesavage, J. (2006). Coping, symptoms, and functioning outcomes of patients with posttraumatic stress disorder. *Journal of Traumatic Stress, 19,* 799–811. http://dx.doi.org/10.1002/jts.20185

Tourigny, M., Mayer, M., Wright, J., Lavergne, C., Trocmé, N., Hélie, S., . . . Larrivée, M.-C. (2002). *Étude sur l'incidence et les caractéristiques des situations d'abus, de négligence, d'abandon et de troubles de comportement sérieux signalées à la Direction de la protection de la jeunesse au Québec* (ÉIQ) (rapport de recherche). Montréal, QC, Canada: Centre de liaison sur l'intervention et la prévention psychosociales (CLIPP).

Trocmé, N., Fallon, B., MacLaurin, B., Daciuk, J., Felstiner, C., Black, T., . . . Cloutier, R. (2005). *Étude canadienne sur l'incidence des signalements de cas de violence et de négligence envers les enfants—2003. Données principales*. Ottawa, ON, Canada: Ministère des Travaux publics et des Services gouvernementaux du Canada.

Williams, S. K., & Kelly, F. D. (2005). Relationships among involvement, attachment, and behavioural problems in adolescence: Examining father's influence. *The Journal of Early Adolescence, 25,* 168–196. http://dx.doi.org/10.1177/0272431604274178

Wolfe, V. V. (1996). Measuring posttraumatic stress disorder: The Children's Impact of Traumatic Events Scale-Revised. *APSAC Advisor, 9,* 25–26.

Wolfe, V. V. (2002). *The Children's Impact of Traumatic Events Scale II (CITES-II)*. Unpublished assessment instrument.

Wolfe, V. V. (2007). Child sexual abuse. In E. J. Mash & R. A. Barkley (Eds.), *Assessment of childhood disorders* (4th ed., pp. 685–748). New York, NY: Guilford Press.

Wolfe, V. V., Wolfe, D. A., Gentile, C., & LaRose, L. (1987). *Children's Impact of Traumatic Events Scale–Revised*. Unpublished assessment instrument, University of Western Ontario, London, Ontario, Canada.

Yancey, C. T., & Hansen, D. J. (2010). Relationship of personal, familial, and abuse-specific factors with outcome following childhood sexual abuse. *Aggression and Violent Behavior, 15,* 410–421. http://dx.doi.org/10.1016/j.avb.2010.07.003

Yuan, K. H., & Bentler, P. M. (2000). Three likelihood-based methods for mean and covariance structure analysis with nonnormal missing data. *Sociological Methodology, 30,* 165–200. http://dx.doi.org/10.1111/0081-1750.00078

Zajac, K., Ralston, M. E., & Smith, D. W. (2015). Maternal support following childhood sexual abuse: Associations with children's adjustment post-disclosure and at 9-month follow-up. *Child Abuse & Neglect, 44,* 66–75. http://dx.doi.org/10.1016/j.chiabu.2015.02.011

Received January 23, 2017
Revision received June 26, 2017
Accepted August 18, 2017 ■