Exploring pathways from child sexual abuse to sexual revictimization: How family factors influence symptoms associated with risk for revictimization

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Introduction

A growing body of literature has implicated the experience of child sexual abuse (CSA) as increasing an individual's risk of being sexually victimized in adolescence or adulthood. For example, large scale survey of 2,000 youth ages 10-16 years found that children with a prior report of CSA were 11.7 times more likely than those without a prior report to have experienced sexual abuse within the past year, an effect that persisted after taking into account repeat victimization by a single perpetrator (Boney-McCoy & Finkelhor, 1995). Additionally, Swanston et al. (2002) reported that about 17% of children with a documented history of sexual abuse disclosed a second substantiated incident of CSA within 6-years after assessment following the first incident. Retrospective surveys of adult women also provide evidence for increased risk of revictimization, indicating that women with a history of sexual abuse are five times more likely to experience attempted or completed rape and three times more likely to experience other forms of sexual assault between the ages of 16 and 18 years compared to women without a sexual abuse history (Fergusson, Horwood, & Lynskey, 1997).

While the goal of many interventions for victims of CSA is to alleviate clinical symptoms, recent literature indicates a need to treat these symptoms not only to improve quality of life but also to prevent future victimization (Cuevas et al., 2010). Numerous models implicate posttraumatic stress symptoms (PTSS), psychological distress, self-blame, difficulties with interpersonal relationships, and risky sexual behaviors as increasing risk for revictimization (Arata, 2000; Classen et al., 2001; Cuevas et al., 2010). The prevention of revictimization is a high priority treatment need since efforts to ameliorate the symptoms associated with CSA are likely to be diminished if abuse re-occurs.

The purpose of the present study is to explore the impact that family cohesion and adaptability, parental depression, annual household income, and presence of a parental spouse/domestic partner have on the development of PTSS, depression, difficulties with interpersonal relationships, and feelings of self-blame after the experience of CSA. It is expected that numerous family factors, taken together, account for a large proportion of the variance in child functioning following the experience of sexual abuse. Specifically, we hypothesize that lower parental depression, higher family cohesion and adaptability, living above the poverty line and presence of a parental spouse or partner will predict fewer child depressive symptoms, PTSS, social problems, and feelings of self-blame. Examining factors that may relate to post-abuse sequelae closely associated with revictimization will help clinicians prioritize children's treatment needs with the goal of preventing future sexual victimization. Fergusson et al. (1997) have shown that family factors are associated with the development of risky sexual behaviors that increase likelihood for revictimization and others have hypothesized that a woman's risk of revictimization reduces as family cohesion and support increase (Gold, Sinclair, & Balge, 1999). It is clear that family factors are associated with overall child outcome (Yancey & Hansen, 2010); however, the relationship between family factors and the development of PTSS, depression, self-blame, and difficulties with interpersonal relationships has not been examined.

Method

Participants

The current sample included children and their non-offending caregivers seeking mental health treatment following the experience of CSA. Children (N = 137) were ages 4 to 12 years (M = 8.96, SD = 2.01), 72.3% were female, 5.1% were African American, 5.8% were Hispanic, 9.9% were multiracial, and 78.8% were European American. Caregivers (N = 137) were ages 23 to 55 years (M = 35.08, SD = 7.21), 85.3% were female, .7% were African American, 5.8% were Hispanic, 4.3% were multiracial, and 86.9% were European American. The majority of caregivers were biological parents (78.8% mothers and 11.7% fathers). The remaining 10.1% represented grandparents, foster parents, and other legal guardians.

Child Report Measures

Children completed assessment measures to provide information regarding depressive symptomatology, social functioning, and the impact of traumatic experiences. The *Child Depression Inventory* (CDI; Kovacs, 1992) Total score was used to measure depressive symptoms while Subscale B was used to measure self-reported interpersonal difficulties. The *Children's Impact of Traumatic Events Scale-Revised* (CITES-R; Wolfe, Gentile, Michienzi, Sas, & Wolfe, 1991) was used to measure PTSS including hyperarousal, avoidance, and total posttramatic stress disorder (PTSD) symptomatology as well as levels of self-blame.

Parent Report Measures

Parents completed a demographic questionnaire, used to determine whether the household income was above or below the poverty line, the *Symptom Checklist-90-Revised* (SCL-90-R; Derogatis, 1983), used to measure parental depression, and the *Family Adaptability and Cohesion Evaluation Scales* (FACES-III; Olson, 1986) which gave insight into the extent to which family members interact with one another and are involved in one another's lives as well as their ability to be flexible in response to unexpected circumstances. The *Child Behavior Checklist* (CBCL, Achenbach, 1991) was used to gather parental report of their child's social problems.

Procedure

Data for the current study were collected as part of an ongoing treatment program (Project SAFE) that is a collaboration between the University of Nebraska-Lincoln and a local Child Advocacy Center. Once referred to the 12-week group intervention, provided free of charge by Project SAFE, children and non-offending parents completed an assessment battery including the instruments described above to assess baseline functioning prior to treatment.

Results

Correlational Analyses

Intercorrelations between family factors are presented in Table 1. FACES cohesion and poverty status were positively correlated with each other but both were negatively correlated with SCL-90-R depression scores. Table 2 presents correlations between family factors and variables thought to be associated with risk for revictimization FACES cohesion was negatively correlated with CDI Total and interpersonal problems subscale scores, CITES-R avoidance, hyperarousal, and PTSD Total subscale scores, and CBCL Social problems subscale scores. Poverty status was negatively correlated with CITES-R PTSD total subscale scores and CBCL social problems subscale scores. Finally, SCL-90-R depression scores were positively correlated with CBCL social problems.

Multiple Regression Analyses

Multiple regression analyses were conducted to assess the relative contribution of individual family factors in predicting each variable thought to be closely associated with risk for revictimization. Regression models were not significant in predicting CDI Total scores, R^2 =.068, $F(5, 83) = 1.211$, p = .311, or CDI interpersonal problems subscale scores, R^2 = .055, $F(5, 85)$ = .980, p = .435. Table 3 summarizes the analysis results for each significant regression model. Family factors accounted for a significant proportion of variance in CITES-R avoidance scores, R^2 = .156, $F(5,72) = 2.657$, p = .029. Children in families with lower cohesion exhibited more avoidance. Considering the CITES-R hyperarousal subscale, the regression model produced R^2 = .12, $F(5, 86) = 2.342$, p = .048, with FACES cohesion having a significant negative weight indicating that children in families with lower cohesion also exhibited more hyperarousal. Family factors accounted for a significant proportion of variance in total CITES-R PTSD scores, R^2 = .146, $F(5, 85) = 2.918$, p = .018. This suggests that children in families low in cohesion had more overall PTSS. Although it was not a significant predictor, poverty status was negatively correlated with CITES-R PTSD scores, $r(103) = -.257$, p = .009. Family factors also predicted a significant proportion of variance in CBCL Social Problems, R^2 = .192, $F(5, 108) = 5.136$, p = .001. Specifically, the model indicated that higher SCL-90-R depression scores were associated with the child exhibiting more social problems.

Table 1
Summary Statistics and Intercorrelations between Family Factors.

Variable	*M*	*SD*	1	2	3	4	5
1. FACES Cohesion	38.34	5.82	--				
2. FACES Adaptability	24.1	4.97	.002	--			
3. SCL-90-R Depression	43.66	9.45	-.178*	.059	--		
4. Parental Partner	.42	.49	.023	.043	-.159	--	
5. Poverty Status	.503	.502	.253**	-.008	-.227*	.472**	--

*$p < .05$, **$p < .01$

Table 2
Summary Statistics and Correlations between Family Factors and Variables Thought to be Closely Associated with Risk for Revictimization.

Variable	*M*	*SD*	FACES Cohesion	FACES Adaptablity	SCL-90-R Depression	Parental Partner	Poverty Status
CDI Total	51.57	10.31	-.201*	.118	.074	-.050	-.007
CDI Interpersonal Problems	56.46	13.49	-.229*	.025	.043	.039	-.086
CITES-R Avoidance	11.09	1.72	-.339**	-.061	.199	.018	-.088
CITES-R Hyperarousal	5.67	2.92	-.331**	.003	.148	.002	-.169
CITES Self-blame/Guilt	5.15	4.11	-.185	.022	.028	.095	-.059
CITES Total PTSD	29.11	9.47	-.383**	.049	.089	-.030	-.257**
CBCL Social Problems	59.19	10.11	-.197*	-.119	.332**	-.012	-.191*

*$p < .05$, **$p < .01$

Table 3
Results from Regression Analyses Across Criterion Variables.

Variable	*b*	*SEB*	ß
CITES-R Avoidance			
FACES Cohesion	-.085*	.034	-.282
FACES Adaptability	-.022	.038	-.063
SCL-90-R Depression	.038	.019	.221
Parental Partner	.366	.398	.112
Poverty Status	.071	.405	.022
CITES-R Hyperarousal			
FACES Cohesion	-.159**	.057	-.295
FACES Adaptability	.023	.066	.035
SCL-90-R Depression	.025	.033	.080
Parental Partner	.517	.659	.088
Poverty Status	-.541	.675	-.092
CITES-R PTSD Total			
FACES Cohesion	-.542**	.179	-.317
FACES Adaptability	.145	.208	.072
SCL-90-R Depression	.009	.105	.009
Parental Partner	1.755	2.076	.094
Poverty Status	-3.283	2.130	-.175
CBCL Social Problems			
FACES Cohesion	-.182	.168	-.098
FACES Adaptability	-.313	.178	-.154
SCL-90-R Depression	.372**	.098	.346
Parental Partner	2.475	1.992	.121
Poverty Status	-2.530	2.050	-.123

*$p < .05$, **$p < .01$

Discussion

The present study explored potential predictors of child outcomes associated with risk for revictimization. While family cohesion, parental depression, and poverty status were associated with various child outcomes related to revictimization risk, family adaptability and presence of a parental spouse or domestic partner were not significant predictors nor did they have any significant associations with any of the criterion variables. Results showed that living below the poverty line was significantly associated with higher levels of total PTSD symptomatology and social problems but did not have an independent contribution in any of the regression models. This could be due to the collinearity between poverty status and family cohesion, parental depression, and presence of a parental spouse or domestic partner. It is also interesting to note that child depression and self-reported interpersonal problems were significantly correlated with family cohesion but neither was predicted by any of the family factors.

Results provided evidence that the current level of family cohesion and parental report of depressive symptoms are negatively associated with child functioning after the experience of sexual abuse. Specifically, children in families with lower cohesion tend to exhibit more PTSS, including avoidance and hyperarousal, and children whose parents indicate suffering from depressive symptoms are more likely to exhibit interpersonal difficulties. Reports of low family cohesion and higher levels of PTSS have been associated with sexual revictimization (Classen, 2005). This emerging evidence suggests that children whose family members interact infrequently and are not involved in each other's lives may be at higher risk for developing PTSS after the experience of sexual abuse. Results were consistent with research indicating that parental depression impacts child adjustment (Elgar et al., 2004), more specifically in areas related to social behaviors. Addressing factors that may influence a child's social development is an important goal for treating victims of sexual abuse, especially given that social avoidance and nonassertiveness have been associated with revictimization (Classen et al., 2001).

The findings that family cohesion and parental mental health functioning are associated with child outcomes that may increase risk for sexual revictimization calls attention to the need for clinicians to screen for these issues and consider them as part of a treatment plan. These findings provide support for considering needs of the whole family after the disclosure of sexual abuse. Further research is needed to adequately understand the relationship between family and parental functioning and child outcomes as well as to determine whether addressing these issues will improve child functioning and subsequently reduce the risk for revictimization.