

Complex Clinical Needs of Sexually Abused Youth: Psychological and Behavioral Symptoms as Predictors of Sexual Behavior Problems

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Introduction

Child sexual abuse is a disturbingly prevalent problem. Child protective service agencies in the United States reported that in 2002, 1.2 children per 1,000 experienced sexual abuse (U. S. Department of Health and Human Services, 2004). A considerable amount of research has been conducted to assist in understanding the impact sexual abuse can have on a developing child. Research has continually shown that sexually abused children are at greater risk of having behavior problems (e.g., aggression), sexualized behavior, internalizing problems (e.g., depression, anxiety), post-traumatic stress symptoms, and academic problems (Kendall-Tackett et al., 1993; Paolucci, Genuis, & Violato, 2001). Because of the explicit sexual nature of sexual abuse compared to other forms of maltreatment, several studies have demonstrated a stronger link between sexual abuse and sexual behavior problems in children and adolescents than in other clinical or abused samples (Friedrich et al., 2001; Kendall-Tackett et al., 1993). Such sexual behaviors can include boundary violations, masturbation, imitating sexual acts, viewing pictures or images of nude or partially dressed people, and attempting to undress other children or adults against their will. For the most part, however, research has focused on young children (ages 2-7) and adolescents (ages 13-17), and has neglected those in middle childhood. Additionally, many children display a combination of symptoms after experiencing sexual abuse, not simply sexualized behavior. As a result, a more systematic understanding of the relationship among sexual abuse and its potential consequences, particularly sexualized behavior, is needed.

The purpose of the present study was to contribute to the literature on the relationship between child sexual behavior problems and other common outcomes of sexual abuse (i.e., internalizing problems, externalizing problems, and post-traumatic stress symptoms). More specifically, this study explored the influence of child demographic variables (e.g., age and gender), internalizing variables (e.g., depression, anxiety, self-esteem), externalizing variables (e.g., aggression, rule-breaking behavior), and post-traumatic stress symptoms (e.g., avoidance, intrusive thoughts) to sexually abused youths' sexual behavior. A primary goal was to further understand how these variables may differentially influence and contribute to the sexual behavior displayed by sexually abused youth.

Method

Participants

Participants included 91 sexually abused youth and their non-offending caregivers who were recruited primarily from a Child Advocacy Center that completed sexual abuse evaluations. The mean age of the youth was 11.56 years ($SD = 2.83$; range 6.08 to 16.75) and the majority were female (78%). Sixty-eight (74.7%) of the youth in the sample identified themselves as Caucasian, nine (9.9%) identified as African American, nine (9.9%) identified as Bi-racial, two (2.2%) identified as Hispanic American, two (2.2%) identified as Multi-racial, and one (1.1%) identified as Native American. Most of the victims were abused by only one perpetrator (84.8%) with 93.5% of the offenders being male and 59.7% being family members. Only five children experienced non-contact forms of abuse (i.e., exposure, pornography) and the most common type of sexual abuse behaviors identified in this sample was fondling (71.7%).

The mean age of the caregivers was 36.42 years ($SD = 6.28$; range 23 to 60). The majority of non-offending caregivers were a biological parent with 74.4% being the biological mother and 15.1% being the

biological father. Seventy-six (89.4%) of the parents in the sample identified themselves as Caucasian, four (4.7%) identified as African American, one (1.2%) identified as Hispanic American, and four (4.7%) identified as Bi-racial. The sample was predominately lower to lower-middle class with 26 (30.6%) living in households earning 15,000 dollars or less and 21 (24.7%) earning 25,001 to 40,000 dollars.

Measures

Child report measures included the Children's Depression Inventory (CDI), Children's Manifest Anxiety Scale-Revised (CMAS-R), the Coopersmith Self Esteem Inventory (SEI), and the Children's Impact of Traumatic Events-Revised (CITES-R). Caregiver report measures included the Child Behavior Checklist (CBCL) and the Child Sexual Behavior Inventory-Second edition (CBSI-II). Due to the number of measures utilized and the sample size, total scores were used in the analyses.

Results

Descriptive and Correlational Analyses

Descriptive statistics for the parent and child report variables are presented in Table 1. Prior to conducting the regression analysis, a correlation matrix of the selected variables for the entire sample ($N = 91$) was constructed (Table 2). Child sexual behavior problems was significantly correlated with the CBCL Internalizing and Externalizing Problems Totals as well as the CITES PTSD Scale. As anticipated, there were multiple correlations among the behavioral and psychological variables, particularly among the child reported variables. Surprisingly, the demographic variables were not related to sexual behavior problems or the behavioral and psychological variables, with the exception being that younger children were more likely to report higher levels of PTSD symptoms.

Child age was used as a categorical variable in regression analyses (ages 6 to 9, 10 to 12, and 13 to 16), so that we could evaluate the impact of various age groups on sexual behavior problems. Means for the three age groups on the CSBI-II Total are as follows: 10.39 for those children ages 6 to 9, 6.39 for children ages 10 to 12, and 7.59 for the youth ages 13 to 16.

Hierarchical Multiple Regression Analyses

Hierarchical (nested) regression analyses were conducted to determine the relative contributions of demographic variables, internalizing and externalizing problems, and post-traumatic stress symptoms to sexual behavior problems of sexually abused youth. Using the Child Sexual Behavior Inventory Total Score as the criterion variable, the following subsets of variables were entered into the regression in two blocks: first, all demographic variables (i.e., child age and gender) and second, all internalizing and externalizing problem and post-traumatic stress symptom variables (i.e., CDI Total Score, CITES-R PTSD Scale, CMAS-R Total Anxiety Scale, SEI Total Self Scale, CBCL Internalizing Problems Scale, CBCL Externalizing Problems Scale).

The overall model was significant [$F(3,86) = 6.35, p < .001, R^2 = .426$] with higher levels of externalizing problems as reported by the caregiver predicting higher levels of child sexual behavior problems. As expected, the psychological and behavioral symptom variables contributed significantly to the model over and above the contribution of demographic variables [F -change (6,83) = 8.88, $p < .001$].

Discussion

The purpose of the present study was to explore the influence of child demographic variables (e.g., age and gender), internalizing variables (e.g., depression, anxiety, self-esteem), externalizing variables (e.g., aggression, rule-breaking behavior), and post-traumatic stress symptoms (e.g., avoidance, intrusive thoughts) on sexually abused youths' sexual behavior.

Overall, youths' demographic as well as psychological and behavioral symptom variables contributed less to child sexual behavior problems than was expected. The psychological and behavioral symptom variables contributed over and above the contribution of demographic variables,

however, only caregiver reported externalizing problems were found to be predictive of higher levels of sexual behavior problems displayed by the youth.

A limitation of this study is the nature and small size of the sample, which limits generalizability of the present findings to other populations. Therefore, results should be further explored using different and larger samples in order to more fully understand the relationship between child sexual behavior problems and psychological and behavioral symptoms. Additionally, the assessment of sexual behavior problems and externalizing problems should be obtained from the child as well as the parent. Adolescent subjective report on sexual behavior seems especially important given the decreased opportunities for parents to observe teen sexual behavior and decreased sexual self-disclosure to parents. In fact, Friedrich (2004) found that parent and adolescent report on sexual behavior share only 25% of their variance, which reflects their differing perceptions about the adolescent's sexual behavior and the lack of knowledge that parents have about their teen's sexual practices.

While this study only begins to address some of the gaps in the literature, results indicate that the development of sexual behavior problems after experiencing sexual abuse is complex and deserves continued research. From a clinical perspective, these results suggest that sexually abused children who display increased levels of externalizing problems should be carefully monitored for the development of sexual behavior problems and may benefit from early intervention.

References

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Table 1: Descriptive Statistics for Parent and Child Report Variables

	<u>M</u>	<u>SD</u>	Range
CSBI Total	8.09	9.820	0-47
CDI Total	54.11	12.834	34-92
CITES PTSD Scale	27.16	10.021	2-49
RCMAS Total Anxiety	53.88	12.254	28-92
SEI Total Self Scale	62.45	18.576	22-98
CBCL Internalizing Problems Scale	62.01	11.060	33-85
CBCL Externalizing Problems Scale	60.93	12.365	32-91

Table 2: Correlational Matrix of Selected Demographic, Sexual Behavior Problems, and Child Psychological and Behavioral Symptom Variables

	1	2	3	4	5	6	7	8	9
1. CSBI Total	1.00								
2. Child's Age (months)	-.098	1.00							
3. Child's Gender	.043	.245*	1.00						
4. CDI Total	.062	.145	.057	1.00					
5. CITES PTSD Scale	.239*	-.241*	-.044	.474**	1.00				
6. RCMAS Total Anxiety	..120	.090	-.099	.581**	.576**	1.00			
7. SEI Total Self Scale	-.071	-.112	.093	-.717**	-.484**	-.659**	1.00		
8. CBCL Internalizing Problems Scale	.366**	.176	-.143	.163	.252*	.392**	-.267*	1.00	
9. CBCL Externalizing Problems Scale	.612**	.061	-.061	.147	.224*	.212*	-.175	.634**	1.00

* $p < .05$

** $p < .001$

Table 3: Summary of Hierarchical Multiple Regressions With Sexual Behavior Problems as the Criterion Variable

Step and Variable	In β	Final	R ²	ΔR^2
Step 1			.029	
Child's Age 6-9 vs. Other	.050	.104		
Child's Age 13-16 vs. Other	.188	.045		
Child's Gender	.037	-.105		
Step 2			.426*	.397*
CDI Total Score	—	-.014		
CITES-R PTSD Scale	—	.112		
SEI Total Self Scale	—	.033		
CMAS-R Total Anxiety Scale	—	-.028		
CBCL Internalizing Problems Total		.014		
CBCL Externalizing Problems Total	—	.618*		

* $p < .001$