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Resilience in Sexually Abused Women: Risk and Protective Factors

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Abstract The goal of this study was to evaluate the contribution of family characteristics (family conflict and cohesion) and abuse characteristics (age at which abuse occurred, abuse severity, and relationship to perpetrator) to resilience (self-acceptance, ability to engage in positive relationships with others, and environmental mastery) in a sample of one hundred and 77 university women who had experienced childhood sexual abuse (CSA). The respondents completed a questionnaire that focused on childhood experiences including family environment in childhood, characteristics of the abuse they had experienced in addition to degree of current resilience defined as their level of well-being (self-acceptance, ability to engage in positive relationships with others, and environmental mastery). The results indicated that family characteristics accounted for 13-22% of the variance in the well-being outcomes. In contrast, abuse characteristics accounted for 3% or less of the variance in the well-being outcomes. The clinical implications of these findings are discussed.

Keywords Childhood sexual abuse · Family cohesion · Family conflict · Resilience · Well-being

Introduction

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According to the U.S. Department of Health and Human Services (USDHHS 2000), approximately 1 million chil-

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1997; Peters et al. 1986). Gorey and Leslie narrow this range based on an integrative review of 16 studies of prevalence adjusted for potential response bias and report a prevalence estimate of 12-17% for women and 5-8% for men. The estimated percentages, while smaller than original estimates, nonetheless suggest that sexual abuse is prevalent in society and should be a critical issue for research and intervention. An extensive body of literature has been accumulated documenting the adverse impact of CSA on the emotional, social, and academic adjustment of survivors (Ackerman et al. 1998; Beichman et al. 1992; Collings 1995; Jumper 1995). Depression, post-traumatic stress disorder (PTSD), substance abuse, impaired academic/occupational functioning, and inappropriate sexual behavior are among the myriad of outcomes observed in children, adolescents, and adults who have experienced CSA (Ackerman et al. 1998; Kendall-Tackett et al. 1993; Jumper 1995; Meyerson et al.

2002). The extensive variation in outcome for CSA

survivors has led to research evaluating potential predictors

of survivor outcome. Variables of interest have included the

relationship of the child to the perpetrator, the age at which

the child was abused, characteristics of the abuse itself

(e.g., use of force, penetration, etc.), and family character-

dren in the US were victims of child maltreatment in 1998.

Of these, 12% were victims of child sexual abuse (CSA).

Despite this high, substantiated incidence of CSA, many

researchers believe that CSA is underreported because it is

often shrouded in secrecy and silence. Various retrospective

studies with adult populations report a wide range of

prevalence of CSA. These numbers range from 6% to 62%

in women and 3% to 31% in men depending on how the

data was collected as well as the nature of the population

sampled (e.g., clinical versus non-clinical populations)

(Damon and Card 1992; Finkelhor 1990; Gorey and Leslie

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istics including caretaker response and support following revelation of the abuse (Beichman et al. 1992; Kendall-Tackett et al. 1993; Rosenthal et al. 2003).

The data examining predictors of outcome in CSA survivors has yielded mixed results. For example, while many studies indicate that being abused by family members (intra-familial abuse), especially fathers, has greater negative impact than being abused by non-family members (extrafamilial abuse) (Banyard et al. 2002; Gomes-Schwartz et al. 1990), some researchers do not find this relationship (Mannarino et al. 1991). Indeed, a few researchers have even observed the opposite. For example, Hazzard et al. (1995), in a study with 56 girls, reported that those children who had a closer relationship to the perpetrator were rated as better adjusted by clinicians using the global assessment scale (GAS). Similarly, Bennett et al. (2000) found more distress in women who had experienced severe extra-familial abuse, leading these researchers to conclude that the use of force is a significant contributor to outcome. Finally, Gold (2000) has suggested that children who are sexually abused live in a context of family dysfunction regardless of the nature of the relationship to the abuser (intrafamilial vs. extrafamilial). These discrepant findings speak to the complexity of this issue, while there might be a greater sense of betrayal when abused by a family member, characteristics of the abuse itself or of the family may interact to influence the outcomes.

Severity of abuse, including the nature (e.g., coitus) and duration of the abuse has been linked in several studies to adjustment outcomes (Beichman et al. 1992; Conte and Schuerman 1987; Wolfe et al. 1989). These studies suggest that severe abuse (such as use of force) yields the most negative outcomes. Morrow and Sorrell (1989), in a study with incest survivors ages 12–18, reported that severity, in this case coitus, was the "most powerful predictor of distress levels" (p. 677). The findings on severity of CSA are, unfortunately, clouded because researchers use different definitions and methods of calculating severity. Nevertheless, empirical evidence suggests that abuse characteristics account for only relatively small amounts of the variance in CSA sequelae (See Spaccarelli 1994).

Scholars have also been interested in understanding how the child's developmental level or age at the time of abuse might impact CSA outcomes. Some studies (e.g., Hazzard et al. 1995; Wolfe et al. 1989) suggest that younger children are more susceptible to the negative effects of CSA. Others (e.g., Paradise et al. 1994), in contrast, report that older children show more persistent negative outcomes. Closer examination of the data, however, suggests that the nature of the outcome evaluated explains, in part, these seeming discrepancies. Morrow and Sorell (1989), for example, reported that younger children tended to exhibit more negative self-esteem effects while older children were more

likely to exhibit negative behavior. These differences make sense developmentally; in their review of the literature, Kendall-Tackett et al. (1993) note that different CSA sequelae are to be expected depending on the age or developmental phase at which the child was abused. This variation in outcome highlights the importance of using multiple outcome measures.

Hecht and Hansen (2001) suggest that family structure and climate impact child outcomes. This assertion is supported by many researchers' empirical work (Banyard et al. 2002; Bennett et al. 2000; Gold et al. 2004; Reinemann et al. 2003). Research comparing CSA survivors to non-CSA controls indicates that the survivors are more likely to perceive their families as authoritarian (Hulsey et al. 1992; Reinemann et al. 2003), more conflictual, less cohesive, less supportive (Faust et al. 1997; Harter et al. 1988; Hulsey et al. 1992; Kern and Hastings 1995; Koverola et al. 1996; Long and Jackson 1994; Ray et al. 1991), and more disorganized (Long and Jackson 1994). Beyond CSA survivor versus non-CSA control comparisons, researchers indicate that among CSA survivors, those who show resilience (good outcomes despite their history of being victimized) have more stable families (Banyard et al. 2002; Hyman and Williams 2001). Indeed, Kendall-Tackett et al. 1993, in their review of the literature, identified family support as a "key variable in recovery" (p. 172). The findings that a moderate number of CSA survivors show little or no negative effects following CSA (Kendall-Tackett et al. 1993), and that resilience is evident in some survivors has led to an attempt to distil and understand factors that promote good functioning in CSA survivors.

The field has been energized by the notion that there exist potentially modifiable factors that can enhance positive adjustment in CSA (Dufour et al. 2000; Spaccarelli and Kim 1995). However, given the complexity of "resilience" as a construct, several methodological issues, including how to define resilience, have been raised (Kinard 1998). For example, one question is whether resilience should be viewed as the demonstration of positive functioning in those at risk for negative outcomes (e.g., those living in poverty, living in violent neighborhoods, experiencing abuse), whether it should refer to the observation of competent functioning in individuals facing substantial life stress, or if robust recovery following trauma is the appropriate criterion (see Masten et al. 1990)? Indeed, many researchers have been advocating that resilience ought to refer to more than simply the absence of psychopathology (Ginzenko and Fisher 1992; Luthar 1993; Luthar et al. 2000). Those advocating this approach have, for example, identified factors such as academic and interpersonal competence and other positive characteristics as indicators of resilience (Garmezy et al. 1984; Radke-Yarrow and Sherman 1990).



Among the promising characteristics reported in the literature as contributors to resilience include having a close relationship with a caretaker or other supportive adult (Banyard et al. 2002; Elliot and Carnes 2001; Feiring et al. 1998; Hazzard et al. 1995; Rosenthal et al. 2003; Spaccarelli and Fuchs 1997; Valentine and Feinauer 1993), having structure, organization, and stability in the home (Banyard et al. 2002; Hyman and Williams 2001), and being able to positively reframe events or having an optimistic outlook (Himelein and McElrath 1996; Valentine and Feinauer 1993).

Consistent with the notion that resilience refers to more than the absence of pathology, we defined resilience as having high levels of well-being (Ryff 1989). We purposefully selected a relatively high functioning sample of state university women already exhibiting one form of resilience, i.e., educational attainment (Hyman and Williams 2001) who had experienced CSA, to see what variables contributed to their psychosocial well-being. In our study, we further defined resilience in terms of 3 indicators of wellbeing (Positive Relations with Others, Environmental Mastery, and Self-Acceptance) (Ryff 1989). We examined the role of abuse severity, age at time of abuse, the relationship between the perpetrator and survivor, and the contribution of family factors to psychological well-being in these subjects. We anticipated, consistent with previous literature that abuse characteristics and child-perpetrator relationship would account for some of the variance in well-being outcomes. We further hypothesized that family variables, including family conflict and family cohesion, would provide the greatest explanatory value in understanding the resilience (as measured by psychological wellbeing) observed in this female adult CSA survivor population.

Method

Participants

The participants were 177 females attending a state university in southern California who reported a history of sexual abuse. Their ages ranged from 18 to 64 with a mean age of 27.8. The sample consisted of 47% White, 25% Latino, 16% Black, and 12% "other." Participants were from several general education classes and represented a variety of college majors.

Procedure

The participants were recruited from large general education classes offered at a Southern California University. Students were told that the study was about childhood experiences and that extra-credit slips would be given for their participation. Subjects completed the questionnaires on their own time and returned them to their instructors or to designated campus offices. Respondents who indicated sexual experiences prior to age 16 with someone 5 years or older were considered "sexually abused." The study was approved by the University's IRB and subjects were treated according to APA ethical guidelines.

Measures

Childhood Sexual Abuse (Finkelhor 1979) Sexual abuse was assessed using a modified version of Finkelhor's (1979) "Childhood Experiences" Survey. Participants were asked to respond to 10 sexual experience items that ranged from "an invitation or request to do something sexual" to actual intercourse. The frequency of sexual experiences on this measure was summed to derive a "severity of sexual abuse" (cumulative) score. In addition, the "level" of sexual abuse was derived by classifying (a) sexual comments and exhibitionism as "low severity;" (b) fondling and touching as "moderate severity;" and (c) intercourse as "high severity."

Scales of Psychological Well-Being (Ryff 1989) This measure was designed to assess six dimensions of psychological well-being or positive psychological functioning. The factors are measured on a 6-point Likert format from 1 (strongly disagree) to 6 (strongly agree). Three 14 item subscales were used for the present study: Positive Relations with Others, Environmental Mastery, and Self-Acceptance. Positive Relations with Others pertains to the respondent's ability to initiate and maintain warm relationships with others. A typical item on this measure is "most people see me as loving and affectionate." Environmental Mastery relates to an individual's sense of competence in managing her everyday affairs. A representative item from this subscale is "I generally do a good job of taking care of my personal finances and affairs." Self-Acceptance measures the degree to which satisfaction with self and acceptance of both the positive and negative parts of self is experienced. A characteristic item from this measure is "in general, I feel confident and positive about myself." For the present study, the alpha coefficients for the subscales were 0.79, 0.72, and 0.88 respectively.

Family Environment Scale (Moos and Moos 1986) This instrument consists of 10 subscales that measure respondents' perceptions of their immediate family. The directions instructed participants to think about each item with their family of origin, "the family you grew up with" and respond to a Likert-type format where $1 = almost \ never$ to $4 = almost \ always$. Two nine-item subscales were used in



this study: Family Cohesion and Family Conflict. A typical item on the Family Cohesion domain is "Family members really help and support one another." In this study, the alpha coefficient for this factor was .77. A representative item from the Family Conflict dimension is "We fight a lot in our family." The alpha coefficient for this factor was .70.

Demographic and General Information Questionnaire This instrument was developed by the researchers to obtain demographic characteristics (e.g., age, ethnicity, income) as well as information relevant to the sexual abuse (e.g., age sexual experience began, relationship to abuser). In addition, respondents were asked to indicate if they told another person about the experience.

Results

Means, standard deviations, and bivariate correlations for all study variables are presented in Table 1. Prior to conducting the primary analyses, data were screened for out-of-range values, missing data, and violations of univariate and multivariate normality, using criteria identified by Tabachnick and Fidell (2001). There were no outof-range values in the data set, however partial missing data were observed for fifteen cases. These cases were left in the data set, though necessarily excluded from the primary analyses. Examination of skewness and kurtosis values indicated univariate normality for all variables except the abuse characteristic "Cumulative Severity", which was minimally positively skewed. The violation was slight, and representative of the population distribution (i.e., there are more cases of mild abuse than severe abuse). Consequently the variable was not transformed. Finally, the use of p<0.001 criterion for Mahalonobis distance revealed no multivariate outliers, resulting in a final sample for the primary analyses (n=162).

In order to test study hypotheses, a series of hierarchical multiple regression analyses were conducted. A separate analysis was conducted to examine the impact of family variables on resilience among sexually abused women. Resiliency outcomes examined in the analyses were the formation of positive relations with others, environmental mastery, and self-acceptance.

For each analysis, predictor variables were entered in two steps. In the first step, four variables representing characteristics of the abuse incidents were entered. These included two measures of the severity of the abuse: Severity "cumulative" included the sum of the number of abuse incidents (e.g., fondling, invitation to do something sexual, coitus); Severity "level" indicated by the most severe incident, was derived by classifying (1) sexual comments and exhibitionism as "low severity;" (2) fondling and touching as "moderate severity;" and (3) intercourse as "high severity." Other abuse characteristics entered in Step 1 included the age at which the abuse began, and the relationship (intra-familial family or extra-familial) of the abuser to the child. In the second step, two family variables were entered simultaneously. The family variables were family cohesion and family conflict. The order of entry was intended to allow for the examination of the importance of family characteristics on the resiliency of female victims of sexual abuse after controlling for characteristics of the abuse incidents.

Regression results for each of the three resiliency outcomes are presented in Tables 2, 3, and 4. Table 2 reveals a significant model [F(6,167) = 3.813, p < 0.01] for the prediction of positive relations with others. The overall model explains 16% of the variance in positive relationships with others. Abuse characteristics accounted for only 3% of the variance, 13% of the variance was explained by family variables. In the final model, none of the individual abuse characteristics proved to be significant. Of the family characteristics, only family cohesion was found to be a significant predictor of positive relations with others.

Table 1 Means, standard deviations, bivariate correlations, and scale alphas of study variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Severity (cumulative)	3.28	2.63	_								
2. Severity (level)	1.80	0.72	0.72								
3. Age of experience	10.68	3.76	0.00	-0.18	_						
4. Abuser relation ¹	1.30	0.46	0.08	0.23	-0.36	_					
5. Family cohesion	3.42	0.56	-0.15	-0.17	0.10	-0.25	(0.77)				
6. Family conflict	2.96	0.56	0.17	0.19	-0.07	0.15	-0.61	(0.70)			
7. Positive relations	4.59	0.83	-0.05	-0.14	0.12	-0.03	0.31	-0.22	(0.79)		
8. Environmental mastery	4.27	0.77	0.08	-0.01	0.11	0.01	0.27	-0.30	0.59	(0.72)	
9. Self acceptance	4.24	0.77	0.07	-0.02	0.10	-0.02	0.32	-0.42	0.69	0.74	(0.88)

Listwise n=174. Coded 1 for "non-family member" and 2 "family member." Alpha coefficients are listed in parentheses in the diagonal where appropriate



Table 2 Regression results for positive relations with others

Independent variables	В	SE B	β
Step 1			
Severity (cumulative)	0.02	0.04	0.08
Severity (level)	-0.21	0.13	-0.18
Age of experience	0.02	0.02	0.11
Abuser relation	0.08	0.15	0.04
Step 2			
Severity (cumulative)	0.03	0.03	0.11
Severity (level)	-0.19	0.13	-0.16
Age of experience	0.02	0.02	0.10
Abuser relation	0.20	0.15	0.11
Family cohesion	0.43	0.14	0.29*
Family conflict	-0.05	0.14	-0.04

 $R^2 = 0.03$ for Step 1; $\Delta R^2 = 0.13$ for Step 2. n = 162*p < 0.05

Specifically, greater family cohesion was associated with greater resiliency among the sexually abused women.

Table 3 reveals a significant model [F(6,167) = 4.870,P < 0.01] for the prediction of environmental mastery. The overall model explains 19% of the variance in environmental mastery. Again, abuse characteristics accounted for a small portion (3%) of the variance, family variables accounted for 16% of the variance. Unlike the prediction of positive relations, one abuse characteristic proved to be a significant independent predictor. Cumulative severity was found to be a significant predictor of environmental mastery (p < 0.05). Surprisingly, a greater number of abuse events were associated with greater resiliency. Results for the family characteristics reveal both family cohesion and family conflict to be significant predictors. Specifically, greater family cohesion was associated with greater resilience; additionally, greater family conflict was associated with lowered resiliency.

Table 3 Regression results for environmental mastery

Independent variables	B	SE B	β
Step 1			
Severity (cumulative)	0.05	0.03	0.17
Severity (level)	-0.15	0.12	-0.14
Age of experience	0.02	0.017	0.11
Abuser relation	0.11	0.14	0.06
Step 2			
Severity (cumulative)	0.06	0.03	0.21*
Severity (level)	-0.12	0.12	-0.11
Age of experience	0.02	0.02	0.10
Abuser relation	0.21	0.13	0.13*
Family cohesion	0.25	0.13	0.18*
Family conflict	-0.31	0.13	-0.22*

 $R^2 = 0.03$ for Step 1; $\Delta R^2 = 0.16$ for Step 2. n=162 *p < 0.05

Table 4 Regression results for self-acceptance

Independent variables	B	SE B	β
Step 1			
Severity (cumulative)	0.04	0.03	0.16
Severity (level)	-0.14	0.12	-0.13
Age of experience	0.02	0.02	0.08
Abuser relation	0.04	0.14	0.03
Step 2			
Severity (cumulative)	0.06	0.03	0.21*
Severity (level)	-0.10	0.11	-0.10
Age of experience	0.02	0.02	0.08
Abuser relation	0.17	0.13	0.10
Family cohesion	0.19	0.12	0.14
Family conflict	-0.50	0.12	-0.36*

 $R^2 = 0.02$ for Step 1; $\Delta R^2 = 0.22$ for Step 2. n = 162*p < 0.05

Table 4 presents the results for the self-acceptance measure of resiliency. Findings indicate that the model again proves significant in the prediction of resilience [F (6,167) = 7.749, p<0.01]. Overall, the model explained 24% of the variance in self-acceptance, 22% of which was accounted for by the family characteristics variables entered in Step 2. Once again, abuse characteristics accounted for a minimal (2%) amount of variance. In the final model, cumulative severity was the only abuse characteristic to be significant (p<0.05). Again, an increase in the number of abuse incidents was associated with increased resiliency. Of the family characteristics, family conflict was revealed to be a significant predictor of self-acceptance. Specifically, as family conflict increased, resiliency in the form of self-acceptance decreased.

In sum, the results provide consistent support for the importance of family characteristics in the prediction of resiliency among sexually abused women. Although the regression results suggest that only in the prediction of environmental mastery were both family characteristics significant (family cohesion was the only family characteristic significant in the prediction of positive relations, and family conflict was the only family characteristic significant in the prediction of self-acceptance) an examination of the zero-order correlations in Table 1 suggests that both family characteristics are important in the prediction of resiliency. The relationship between family conflict and family cohesion suggests that they share variance explained and, consequently, only the stronger of the two would emerge as significant in the regression analyses. Despite this, we would argue that collectively, the results argue for the importance of both family characteristics examined in this study.

The importance of family characteristics is demonstrated by their accounting for a substantial proportion of the variance in resiliency outcomes above and beyond the



variance explained by characteristics of the abuse itself. It is worth noting that for each of the three resiliency outcomes, family characteristics explained far more variance in resiliency than did abuse characteristics. Further, for no outcome did the variance explained by abuse characteristics exceed 3%. Clearly, family characteristics are critical.

Discussion

In this study, we were interested in evaluating the contribution of several family and abuse characteristics to long-term outcomes in a female college sample that had experienced CSA. This sample was sought to ensure resiliency as defined by academic competence. Specifically, we were interested in identifying factors that promote resilience in CSA survivors in a college setting. We defined resilience as well-being, rather than simply the absence of pathology (Himelein and McElrath 1996), and considered self-acceptance, positive relations with others, and environmental mastery as important components of resilience.

Our data indicate, consistent with Spaccarelli (1994) that abuse-specific features account for relatively small amounts of the variance in psychological outcomes in CSA survivors. In this study, the abuse-specific characteristics explained 3% or less of the variance in CSA survivor wellbeing. Nevertheless, we did obtain some unexpected findings in the relationship between abuse-characteristics and two of the resiliency outcomes. We found a positive relationship between severity-cumulative and both selfacceptance and environmental mastery. That is, subjects who had experienced several different abusive incidents (e.g., being kissed, fondled, asked to engage in oral sex) felt more accepting of themselves and also felt competent in managing their lives' daily routines and demands. While this finding is counterintuitive, it is important to note that we were evaluating a sample already considered "resilient" by some of the criteria in the field (e.g., Hyman and Williams 2001). That is, the participants were all college students and that this may explain this unexpected finding. It is possible that having experienced, and prevailed, over these challenging, intrusive experiences, the survivors in this study felt more positive about themselves and more capable of dealing with life's challenges. As noted by Rak and Patterson (1996), "It appears that when stressful events do not overwhelm the ability to cope, the victory over adversity enhances a sense of self-competence." (p. 370). It is, nevertheless, important to note that abuse-specific features accounted for relatively small amounts of the variance in CSA survivor outcomes.

Consistent with the family and resilience literature (Bander et al. 1989; Elliot and Carnes 2001; Feiring et al. 1998; Rosenthal et al. 2003), our results indicate that family

functioning exerts significant influence on the long-term adjustment of CSA survivors and impacts how they feel about themselves, their ability to establish and sustain healthy, meaningful relationships with others, and their sense of competence in managing their daily affairs. Family cohesion and family conflict accounted for significant proportions of the variance, in positive and negative ways respectively, in the well-being of our subjects.

As noted by other researchers, negative parental responses and lack of support can exacerbate the negative effects of molestation while support and cohesion within the family can reduce psychological distress, enhance self-esteem, and promote social competence (Elliot and Carnes 2001; Feiring et al. 1998; Hazzard et al. 1995; Rosenthal et al. 2003). The finding in this study, that family cohesion was significantly associated with positive relations with others, is very heartening because CSA is a violation that can impact the ability to trust others. This suggests that there are interventions, in this case teaching families to nurture and support each other, which can modify the potentially detrimental impact of molestation on children's ability to engage in healthy relationships.

Our results also indicate a strong positive association between family cohesion and environmental mastery. Cohesion involves support and positive affirmations, characteristics that contribute to a sense of competence, which is important to being able to face life's challenges. As noted by prominent resilience researcher Michael Rutter (1993), positive feelings of "self-efficacy" are probably significant in giving children the confidence they need to actively approach and manage life's demands.

Family conflict was negatively related to self-acceptance in our study. Households characterized by strife and negativity provide growing children with "mirroring" where disapproval and depreciation are common, familiar, frequent experiences. Hulsey et al. (1992) suggest that the "relational and developmental context" within which children experience trauma can easily become incorporated into children's "sense of self." (p. 442). When this context is riddled with discord, contention, and friction, internalizing that negativity would not be an uncommon outcome.

Family conflict was also negatively associated with environmental mastery. Family environments rife with contention, criticism, and dissension are highly unlikely to provide healthy problem-solving strategies. Lacking a constructive or helpful model of how to approach life's challenges, it is not surprising that children who grow up in families characterized by high conflict feel deficient in their ability to manage life's daily challenges. These findings are striking because this sample was comprised of college students, a group that had already exhibited one form of competence by getting admitted into a 4-year university. Despite this academic competence, individuals who expe-



rienced high family conflict felt less effective in their lives than those with less family conflict.

While interesting and informative, our data is limited in its applicability to a college population. Future studies with a community sample will provide confirming or disconfirming evidence on the robustness of our results.

While increased attention to resilience is exciting and promising, many authors (Garmezy 1993; Rutter 1993) have noted that much work remains to be done in further understanding and influencing the processes that promote resilience. Nevertheless, we maintain that the findings of this study, which suggest that family variables can contribute in significant ways to resilience in survivors of CSA, are highly encouraging because family environments are potentially modifiable. If future work confirms the importance of family environment, interventions that strengthen family response and support in the event of sexual trauma can help trauma survivors lead productive, fulfilling, and meaningful lives.

References

- Ackerman, P. T., Newton, J. E. O., McPherson, W. B., Jones, J. G., & Dykman, R. A. (1998). Prevalence of post-traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical, and both). *Child Abuse & Neglect*, 22, 759–774.
- Bander, K., Fein, E., & Bishop, G. (1989). Evaluation of child sexual abuse programs. In S. Sgroi (Eds.) Handbook of clinical intervention in child sexual abuse (pp. 345–376). Lexington, MA: Lexington Books.
- Banyard, V. L., Williams, L. M., Siegel, J. A., & West, C. M. (2002). Childhood sexual abuse in the lives of black women: Risk and resilience in a longitudinal study. Violence in the Lives of Black Women.
- Beichman, J. H., Zucker, K. J., Hood, J. E., DaCosta, G. A., & Akman, D. (1992). A review of the short-term effects of child abuse. *Child Abuse & Neglect*, 16, 537–556.
- Bennett, S. E., Hughes, H. M., & Luke, D. A. (2000). Heterogeneity in patterns of child sexual abuse, family functioning, and longterm adjustment. *Journal of Interpersonal Violence*, 15, 134–157.
- Collings, S. (1995). The long-term effects of contact and noncontact forms of child sexual abuse in a sample of university men. *Child Abuse & Neglect*, 19, 1–6.
- Conte, J. R., & Schuerman, J. R. (1987). Factors associated with an increased impact of child sexual abuse. *Child Abuse & Neglect*, 11, 201–211.
- Damon, L., & Card, J. (1992). Incest in young children. In R. Ammerman, & M. Hersen, (Eds.), Assessment of family violence. New York: John Wiley & Sons.
- Dufour, M. H., Nadeau, L., & Bertrand, K. (2000). Factors in the resilience of victims of sexual abuse: An update. *Child Abuse & Neglect*, 24, 781–797.
- Elliot, 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.
- Faust, J., Kenny, M. C., & Runyon, M. K. (1997). Differences in family functioning of sexually abused vs. nonabused enuretics. *Journal of Family Violence*, 12, 405–416.

Feiring, C., Taska, L., & Lewis, M. (1998). Social support and children's and adolescents' adaptation to sexual abuse. *Journal of Interpersonal Violence*, 13, 240–260.

- Finkelhor, D. (1979). Sexually victimized children. New York: Free Press
- Finkelhor, D. (1990). Early and long-term effects of child sexual abuse: An update. *Professional Psychology: Research and Practice*, 21, 325–330.
- Garmezy, N. (1993). Vulnerability and resilience. In D. C. Funder, R. D. Parke, C. A. Tomlinson-Keasey, & K. Widaman (Eds.), Studying lives through time: Personality and development (pp. 377–398). Washington, DC: American Psychological Association.
- Garmezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development*, 55, 97–111.
- Ginzenko, N., & Fisher, C. (1992). Review of studies of risk and protective factors for psychopathology in children. *Canadian Journal of Psychiatry*, 37, 711–721.
- Gold, S. N. (2000). Not trauma alone: Therapy for child abuse survivors in family and social context. Lillington, N.C.: Taylor & Francis.
- Gold, S. N., Hyman, S. M., & Andres-Hyman, R. C. (2004). Family of origin environments in two clinical samples of survivors of intra-familial, extra-familial, and both types of sexual abuse. *Child Abuse & Neglect*, 28, 1199–1212.
- Gomes-Schwartz, B., Horowitz, J., & Candarelli (1990). *Child sexual abuse: The initial effects.* Newbury Park, CA: Sage.
- Gorey, K. M., & Leslie, D. R. (1997). The prevalence of child sexual abuse: Integrative review adjustment for potential response and measurement bias. *Child Abuse & Neglect*, 21, 391–398.
- Harter, S., Alexander, P., & Neimeyer, R. (1988). Long-term effects of incestuous child abuse in college women: Social adjustment, social cognition, and family characteristics. *Journal of Consult*ing and Clinical Psychology, 56, 5–8.
- Hazzard, A., Celano, M., Gould, J., Lawry, S., & Webb, C. (1995).Predicting symptomatology and self-blame among child sex abuse victims. *Child Abuse & Neglect*, 19, 707–714.
- Hecht, D. B., & Hansen, D. J. (2001). The environment of child maltreatment: Contextual factors and the development of psychopathology. Aggression and Violent Behaviour, 6, 433–457.
- Himelein, M. J., & McElrath, J. V. (1996). Resilient child sexual abuse survivors: Cognitive coping and illusion. *Child Abuse & Neglect*, 20, 747–758.
- Hulsey, T. L., Sexton, M. C., & Nash, M. R. (1992). Sexually abused children—Family relationships. *Bulletin of the Menninger Clinic*, 56, 438–450.
- Hyman, B., & Williams, L. (2001). Resilience among women survivors of child sexual abuse. *Affilia*, 16, 198–219.
- Jumper, S. A. (1995). A meta-analysis of the relationship of child sexual abuse to adult psychological adjustment. *Child Abuse & Neglect*, 19, 715–728.
- Kendall-Tackett, K., Williams, L., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164–180.
- Kern, J. M., & Hastings, T. (1995). Differential family environments of bulimics and victims of childhood sexual abuse: Achievement orientation. *Journal of Clinical Psychology*, 51, 499–506.
- Kinard, E. M. (1998). Methodological issues in assessing resilience in maltreated children. Child Abuse & Neglect, 22, 669–680.
- Koverola, C., Proulx, J., Battle, P., & Hanna, C. (1996). Family functioning as predictors of distress in revictimized sexual abuse survivors. *Journal of Interpersonal Violence*, 11, 263–280.
- Long, P. J., & Jackson, J. L. (1994). Childhood sexual abuse: An examination of family functioning. *Journal of interpersonal* violence, 9, 270–277.



Luthar, S. S. (1993). Annotation: Methodological and conceptual issues in research on childhood resilience. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 34, 441–453.

- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). Research on resilience: Response to commentaries. *Child Development*, 71, 573–575.
- Mannarino, A. P., Cohen, J. A., & Moore-Notily, S. (1991). Six and twelve month followup of sexually abused children. *Journal of Interpersonal Violence*, 6, 494–511.
- Masten, A., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425–444.
- Meyerson, L. A., Long, P. J., Miranda, R. Jr., & Marx, B. P. (2002). The influence of childhood sexual abuse, physical abuse, family environment, and gender on the psychological adjustment of adolescents. *Child Abuse & Neglect*, 26, 387–405.
- Moos, R. H., & Moos, B. S. (1986). Family environment Scale manual. Palo Alto, CA: Consulting Psychologists Press.
- Morrow, K. B., & Sorrell, G. T. (1989). Factors affecting self-esteem, depression, and negative behaviors in sexually abused female adolescents. *Journal of Marriage and the Family*, 51, 677–686.
- Paradise, J. E., Rose, L., Sleeper, L. A., & Nathanson, M. (1994). Behavior, family function, school performance, and predictors of persistent disturbance in sexually abused children. *Pediatrics*, 93, 452–459
- Peters, S., Wyatt, G., & Finekhor, D. (1986). Prevalence. In D. Finkelhor & Associates (Eds.), *A sourcebook on child sexual abuse* (pp. 15–59). Beverly Hills: Sage Inc.
- Radke-Yarrow, M., & Sherman, T. (1990). Hard growing: Children who survive. In J. Rolf, A. S. Masten, D. Cicchette, K. H. Nuechterlein, & S. Weintraub (Eds.). Risk and protective factors in the development of psychopathology (pp. 97–119). Cambridge, UK: Cambridge University Press.
- Rak, C. F., & Patterson, L. E. (1996). Promoting resilience in at-risk children. Journal of Counseling and Development, 74, 368–374.

- Ray, K. C., Jackson, J. L., & Townsley, R. M. (1991). Family environment of victims of intrafamilial and extrafamilial child sexual abuse. *Journal of Family Violence*, 6, 365–374.
- Reinemann, D. H., Stark, K. D., & Swearer, S. M. (2003). Family factors that differentiate sexually abused and nonabused adolescent psychiatric inpatients. *Journal of Interpersonal Violence*, 18, 471–489
- Rosenthal, S., Feiring, C., & Taska, L. (2003). Emotional support and adjustment over a year's time following sexual abuse discovery. *Child Abuse & Neglect*, 27, 641–661.
- Rutter, M. (1993). Resilience: Some conceptual considerations. Journal of Adolescent Health, 14, 626–631.
- Ryff, C. D. (1989). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful aging. *International Journal of Behavioral Development*, 12, 35–55.
- Spaccarelli, S. (1994). Stress, appraisal, and coping in child sexual abuse: A theoretical and empirical review. *Psychological Bulle*tin, 116, 340–362.
- Spaccarelli, S., & Fuchs, C. (1997). Variability in symptom expression among sexually abused girls: Developing multivariate models. *Journal of Clinical and Child Psychology, 26*, 24–35.
- Spaccarelli, S., & Kim, S. (1995). Resilience criteria and factors associated with resilience in sexually abused girls. *Child Abuse & Neglect*, 19, 1171–1182.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th Ed.). Boston: Allyn & Bacon.
- U.S. Department of Health and Human Services (2000). Child maltreatment 1998: Reports from the states to the national child abuse and neglect data system. Washington, DC: U. S. Government Printing.
- Valentine, L., & Feinauer, L. L. (1993). Resilience factors associated with female survivors of childhood sexual abuse. *The American Journal of Family Therapy*, 21, 216–224.
- Wolfe, V. V., Gentile, C., & Wolfe, D. A. (1989). The impact of sexual abuse on children: A PTSD formulation. *Behavior Therapy*, 20, 215–228.

