

Family Context, Victimization, and Child Trauma Symptoms: Variations in Safe, Stable, and Nurturing Relationships During Early and Middle Childhood

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Based on a nationally representative sample of 2,017 children age 2–9 years, this study examines variations in “safe, stable, and nurturing” relationships (SSNRs), including several forms of family perpetrated victimization, and documents associations between these factors and child trauma symptoms. Findings show that many children were exposed to multiple forms of victimization within the family (such as physical or sexual abuse, emotional maltreatment, child neglect, sibling victimization, and witnessing family violence), as evidenced by substantial intercorrelations among the different forms of victimization. Moreover, victimization exposure was significantly associated with several indices of parental dysfunction, family adversity, residential instability, and problematic parenting practices. Of all SSNR variables considered, emotional abuse and inconsistent or hostile parenting emerged as having the most powerful independent effects on child trauma symptoms. Also, findings supported a cumulative risk model, whereby trauma symptom levels increased with each additional SSNR risk factor to which children were exposed. Implications for research and practice are discussed.

Mounting evidence exists of the substantial effects of childhood adversity and problematic family contexts on both child well-being and the long-term health of adults (Chapman et al., 2004; Felitti, Anda, & Nordenberg, 1998; Finkelhor, Ormrod, & Turner, 2007; Turner, Finkelhor, & Ormrod, 2006). Developmental, behavioral, and biological research has convincingly demonstrated the link between early exposure to stressful events and conditions and damage to neurological, physiologic, and psychosocial systems that, in turn,

contribute to a wide array of mental and physical health impairments (Shonkoff, Boyce, & McEwen, 2009). Research suggests that younger children may be especially vulnerable to such adversity (National Scientific Council on the Developing Child, 2005), yet few epidemiologic studies have examined stress and adversity exposure in children under the age of 10 (Finkelhor, Ormrod, Turner, & Hamby, 2005b).

Although early research tended to focus on single forms of adversity, such as child physical abuse, more recent work has taken a broader perspective and considered the intersecting effects of multiple adversities (Appleyard, Egeland, van Dulmen, & Sroufe, 2005; Chapman et al., 2004; Dong et al., 2004), including multiple forms of child maltreatment (Manly, Kim, Rogosch, & Cicchetti, 2001; Mitchell, Finkelhor, & Wolak, 2005; Wells, Finkelhor, Wolak, & Mitchell, 2004). The need for a better understanding of how child victimization occurs within broader risk contexts has also been acknowledged (Turner, 2010; Turner et al., 2006). Recently, the Centers for Disease Control and Prevention has sought to integrate research on child maltreatment within the general context of family relationships, calling for the need to study and promote “safe, stable, and nurturing relationships between children and caregivers” (SSNRs; Centers for Disease Control & Prevention, 2009). Using a nationally

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representative sample of children, the purpose of this article is to provide a preliminary investigation of the interrelationships among SSNR indicators, including several forms of family-perpetrated victimization, and to document their consequences for child mental health.

The Family Environment and Adversity

Exposure to adversity in childhood is very often connected to the family environment. The family is a common source of direct threats to children's personal safety and a common context for children witnessing violence (Finkelhor, Turner, Ormrod, & Hamby, 2009; Finkelhor, Ormrod, et al., 2005b). The family is also central to the development of self-concept and social competencies that contribute to well-being and increase children's resiliency to adversity (Clarke-Stewart & Dunn, 2006). Considerable research on this issue has focused on maltreatment by parents or caregivers. All forms of maltreatment, including physical, emotional, and sexual abuse or failing to provide basic needs (neglect), have been found to importantly influence child health and development (Cicchetti & Toth, 1995; Runyan, Wattam, Ikeda, Hassan, & Ramiro, 2002). Although maltreatment can represent isolated victimization events, it often occurs within a broader context of risk within the family (Cicchetti, 2004; Sidebotham & Heron, 2006; Widom, 1998). Risky family characteristics and conditions can have additional damaging effects and contribute to or exacerbate the effects of maltreatment. Studies have shown, for example, that overt family conflict and anger, deficient nurturing, unresponsive or un-supportive parenting, and family environments characterized by stress, instability, and turmoil are associated with a wide range of emotional and behavioral problems in children (Repetti, Taylor, & Seeman, 2002).

The SSNR framework provides a means for organizing this body of research by focusing on three aspects of the family environment (Centers for Disease Control & Prevention, 2009; Mercy & Saul, 2009). *Safety* refers to the extent to which children are free from fear and harm within their social and physical environment. The use of corporal punishment, inadequate supervision, acts of physical maltreatment, and child neglect represent indicators of an unsafe family environment. *Stability* refers to consistency and predictability in the child's environment. Inconsistent parenting practices, frequent residential moves, household changes, and events that create volatile or stressful family conditions, such as divorce and job loss, can threaten stability. An unpredictable and chaotic family environment can diminish children's sense that the world is trustworthy, dependable, and fair and reduce caregivers' abilities to parent effectively (Conger et al., 2002; Kobak, Cassidy, Lyons-Ruth, & Ziv, 2006; McLoyd, 1990). *Nurturing* is characterized by availability, sensitivity, and warmth in responding to children's needs. Nurturing relationships with caregivers contribute to children's self-esteem and confidence, social competencies, and emotional development (Belsky & Cassidy, 1994; Bowlby, 1979; Harter, 2006; Hennan, Dornbusch, Herron, & Herting, 1997). Emotional maltreatment and parental problems, like mental illness and drug or alcohol abuse, often reduce nurturing relationship qualities (Cicchetti, Rogosch, & Toth, 1998; Goodman & Gotlib, 2002; Lyons-Ruth, Lyubchik, Wolfe, &

Bronfman, 2002; Roosa, Michaels, Groppenbacher, & Gersten, 1993).

Because safe, stable, and nurturing behaviors exist along a continuum, it is useful to examine variations in these behaviors. A better understanding of family and caregiver characteristics that create risk for child safety, stability, and nurturance requires an examination of multiple contextual factors simultaneously with different forms of child maltreatment. This more comprehensive assessment would allow a more nuanced analysis of the independent and combined effects of family context and exposure to victimization. The current research assesses exposure to three different types of maltreatment, including physical and sexual maltreatment by caregivers, child neglect, and emotional maltreatment. We also consider two additional forms of family-perpetrated victimization: victimization by siblings and witnessing family violence. Given the primacy of family influence on development during young and middle childhood (MacCoby, 1984), a focus on family conditions and victimization during this period is especially important. In the present study, we assess SSNR indices among children aged 2–9 years in a large nationally representative sample.

The goals of the current research are to (a) assess the interrelationships among different aspects of childhood family conditions, contexts, and experiences that represent variations in SSNRs. Specifically, we assess associations among five different forms of family-perpetrated victimization (emotional maltreatment, physical or sexual maltreatment, neglect, witnessing family violence, and sibling victimization), parenting behaviors (including hostile and inconsistent parenting, the use of corporal punishment, poor supervision and monitoring of children, and warmth and involvement in the parent–child relationship), parent dysfunction (including parent psychological disorder and substance or alcohol abuse, and interparental conflict), family stressors (including events such as job loss, illnesses, accidents, and disasters), and household instability (including residential moves and living in multiple households) and (b) examine the associations between these SSNR factors and child trauma symptoms.

Method

Participants

The National Survey of Children's Exposure to Violence (NatSCEV) was designed to obtain incidence and prevalence estimates of a wide range of childhood victimizations. Conducted between January 2008 and May 2008, the survey addressed the experiences of a nationally representative sample of 4,549 children aged 0–17 years living in the contiguous United States. Given the particular importance of family influence on development during young and middle childhood, this study focuses on the subsample of 2,016 children aged 2–9 years.

Interviews were conducted over the phone by the employees of an experienced survey research firm. Telephone interviewing is a cost-effective methodology (McAuliffe, Geller, LaBrie, Paletz, & Fournier, 1998; Weeks, Kulka, Lessler, & Whitmore, 1983) that has been demonstrated to be comparable to in-person interviews in data quality, even for reports of victimization, psychopathology, and other sensitive topics (Acierno, Resnick,

Kilpatrick, & Stark-Riemer, 2003; Bajos, Spira, Ducot, & Mesiah, 1992; Bermack, 1989; Czaja, 1987; Marin & Marin, 1989; Pruchno & Hayden, 2000). In fact, some evidence suggests that telephone interviews are perceived by respondents as more anonymous, less intimidating, and more private than in-person modes (Acierno et al., 2003; Taylor, 2002) and, as a result, may encourage greater disclosure of victimization events (Acierno et al., 2003).

The primary foundation of the design was a nationwide sampling frame of residential telephone numbers from which a sample of telephone households was drawn by random digit dialing (RDD). This nationally representative cross section represented 67% of the completed interviews. To ensure that the study included a sizable proportion of minorities and low-income respondents for more accurate subgroup analyses, there was also an oversampling of U.S. telephone exchanges that had a population of 70% or more of African American, Hispanic, or low-income households. This oversample yielded 33% of the completed interviews. Sample weights were applied to adjust for differential probability of selection because of (a) study design, (b) demographic variations in nonresponse, and (c) variations in within household eligibility.

Procedure

A short interview was conducted with an adult caregiver (usually a parent) in each household to obtain family demographic information. One child was randomly selected from all eligible children living in a household by selecting the child with the most recent birthday. If the selected child was under the age of 10 (the target sample for the current study), the interview was conducted with the caregiver who "is most familiar with the child's daily routine and experiences." The interview protocol included procedures to ensure privacy throughout the interview.

Respondents were promised complete confidentiality and were paid \$20 for their participation. The interviews, averaging 45 min in length, were conducted in either English or Spanish. Approximately 6% of the interviews with the parents were conducted in Spanish. Respondents who disclosed a situation of serious threat or ongoing victimization were recontacted by a clinical member of the research team trained in telephone crisis counseling, whose responsibility was to stay in contact with the respondent until the situation was appropriately addressed locally. All procedures were authorized by the Institutional Review Board of the University of New Hampshire.

Response Rates

The cooperation rate for the RDD cross-section portion of this survey was 71%, and the response rate was 54%. The cooperation and response rates associated with the smaller oversample were somewhat lower at 63% and 43%, respectively. These are good rates by current survey research standards (Babbie, 2007; Keeter, Kennedy, Dimock, Best, & Craighill, 2006), given the steady decline in response rates that has occurred over the last three decades (Atrostic, Bates, Burt, & Silberstein, 2001) and the particular marked drop in recent years (Curtin, Presser, & Singer, 2005; Keeter et al., 2006; Singer, 2006). Although the potential for response bias remains an important consideration,

several recent studies have shown no meaningful association between response rates and response bias (Curtin, Presser, & Singer, 2000; Groves, 2006; Keeter, Miller, Kohut, Groves, & Presser, 2000; Merkle & Edelman, 2002).

Measurement

Victimization. The survey utilized an enhanced version of the Juvenile Victimization Questionnaire (JVQ), an inventory of childhood victimization (Finkelhor, Hamby, Ormrod, & Turner, 2005; Finkelhor, Ormrod, Turner, & Hamby, 2005a; Hamby, Finkelhor, Ormrod, & Turner, 2004). Indices of five types of family-perpetrated victimization were constructed using perpetrator descriptions associated with several types of victimization, including any emotional maltreatment (three items; e.g., At any time in your child's life did your child get really scared or feel really bad because grown-ups in your child's life called him/her names, saying mean things to him/her or said they didn't want him/her?), any physical or sexual maltreatment (10 items; e.g., Not including a spanking on the bottom, at any time in your child's life did a grown-up in your child's life hit, beat, kick, or physically hurt your child in any way? At any time in your child's life, did a grown-up your child knows touch your child's private parts when they shouldn't have or make your child touch their private parts? Or did a grown-up your child knows force your child to have sex?), any neglect (one item; When someone is neglected it means that grown-ups didn't take care of them the way they should. They might not get them enough food, take them to the doctor when they are sick, or make sure they have a safe place to stay. At any time in your child's life, was your child neglected?), any victimization by juvenile siblings (12 items; e.g., At any time in your child's life did any kid, even a brother or sister, hit your child? Somewhere like at home, at school, out playing, or anywhere else?), and any witnessing family violence (six items; e.g., At any time in your child's life did one of your child's parents get hit or slapped by another parent? Note: Counted only if child saw or heard the event). Respondents were also asked whether the event had occurred within the past year; for the current research, only past-year victimizations were counted. It should be noted that, although maltreatment items allowed for the inclusion of nonrelated adult perpetrators, the large majority of events were perpetrated by family members or individuals in a caregiving role.

Parenting behavior. Different aspects of parenting behavior were assessed with items from the Parenting Styles and Dimensions Questionnaire (Robinson, Mandlco, Frost Olsen, & Hart, 2001). Specifically, caregivers completed 10 items from the "Warmth and Involvement" component and two items from the "Verbal Hostility" component of the Authoritarian parenting scale. Physical discipline and monitoring and supervision were assessed using a shortened version of the Alabama Parenting Questionnaire (Frick, 1991). Specifically, three items from the *corporal punishment* scale, three from the *inconsistent discipline* scale, and five from the *poor monitoring and supervision* scale were used. Four additional items were created and added to the monitoring and supervision dimension, resulting in a total

of nine items for monitoring and supervision. Caregivers were asked how often they engaged in each behavior in the past year, 1 (*Never*), 2 (*Rarely*), 3 (*Sometimes*), and 4 (*Usually*).

Factor analyses of all parenting items revealed four distinct dimensions. Verbal hostility and inconsistent discipline loaded on the same dimension and were combined into a 5-item summary measure, *inconsistent and hostile parenting*. The alpha coefficient for this scale is .67. *Warmth and involvement* was also a summary measure, having an alpha coefficient of .70. Because the monitoring and supervision items did not show adequate reliability as a scale, they were made into a dichotomous index assessing the presence of *poor monitoring/supervision* (lowest 10% of the sample = 1). *Corporal punishment* was also constructed as a dichotomous measure; respondents were coded 1 on this variable if they *Sometimes* or *Usually* engaged in *any* form of physical punishment. Items used to construct the parenting behavior indices are presented in Appendix A.

Parent conflict. A summary score of two items from the *conflict properties* subscale of the Children's Perceptions of Inter-Parental Conflict (CPIC) Measure (Grych, Seid, & Fincham, 1992) was used to assess parent verbal conflict. Specifically, parents indicated whether the statements *My child often sees his/her parents arguing* and *My child's parents get really mad when they argue* were *very true*, *a little true*, or *not true*. Higher scores indicate greater conflict.

Parental dysfunction. Two types of potential dysfunction were assessed. Drug or alcohol problems were assessed with the question: *Has there ever been a time that a member of your child's family drank or used drugs so often that it caused problems?* Respondents were then asked whether the problems had occurred in the last year. In the present study, a dummy variable was constructed to indicate the presence of past-year drug or alcohol problems. Respondent was also asked whether anyone in the child's family had ever been diagnosed by a doctor, therapist, or other professional with a psychological/behavioral disorder (a list was provided). A follow-up question asked which family members were diagnosed. Two dummy variables were constructed for the present analyses: Mother diagnosed with psychological disorder, 1 (*yes*), 0 (*no*), and father diagnosed with psychological disorder, 1 (*yes*), 0 (*no*).

Family adversity. Family stress was measured with a summary score of nine life events occurring in the past year, including child/family was in a very bad fire, flood, tornado, hurricane, earthquake, or other disaster; mother, father, or guardian lost a job or could not find work; parents got divorced or separated; child/close family member had very bad illness where (child/family member) had to go to the hospital; and parent had to leave the country to fight in a war.

Residential stability. Respondents were asked how many times the child had moved in the past year. A variable was constructed to represent the total number of past-year residential moves. To assess whether a child resided in more than one household, respondents were asked whether, in the past year, the child lived somewhere else besides the respondents'

household (for example, with another parent, relative, or foster care; 1 = yes, 0 = no).

Family risk index. A measure of cumulative family risk was constructed by counting the number of risk factors present (measures described earlier). For variables that were not dichotomous (i.e., inconsistent and hostile parenting, warmth and involvement, family adversity), the risk factor was counted if the respondent fell within the top 10% of the negative end of the dimension. *Residential moves* was counted if the child had moved one or more times in the last year. Although there were 11 risk factors considered, scores were constructed to range from 0 to 7+ to reduce the skew at the high end of the risk index.

Trauma symptoms. A summary measure was constructed from 25 items of the depression, anxiety, anger, and dissociation components of the Trauma Symptom Checklist for Young Children (TSCYC). The instrument was designed to evaluate children's responses to unspecified traumatic events in different symptom domains. Respondents were asked to indicate how often their children had experienced each symptom within the last month. Response options are on a 4-point scale from 0 (*not at all*) to 4 (*very often*). The full measure has demonstrated good reliability and validity in both clinical and population-based samples (Briere et al., 2001). In the current study, the measure has an alpha coefficient of .87.

Demographic measures. Information was obtained on the child's gender (male = 1; female = 0); age (in years); race/ethnicity coded into four groups: White non-Hispanic (reference group), Black non-Hispanic, other race non-Hispanic, and Hispanic any race; and socioeconomic status (SES). SES is a composite based on the sum of the standardized household income and standardized parental education (for the parent with the highest education) scores, which was then restandardized. Family structure, defined by the composition of the household, was categorized into four groups: children living with (a) two biological or adoptive parents (reference group), (b) one biological parent plus partner (spouse or nonspouse), (c) single biological parent, and (d) other caregiver.

Study Measures and the SSNR Framework

Safe, stable, and nurturing relationships exist along a continuum from low to high or from absent to present. The parenting and victimization indices described earlier measure both the presence and absence of safe, stable, and nurturing relationships in families. As such, these measures are a useful framework for exploring the complex web of family risk and promotive factors that affect child well-being. Although these constructs do not have rigid boundaries, they can still be usefully distinguished. Our preliminary conceptualization is as follows: The *safety* component of family relationships includes exposure (or lack of exposure) to (a) physical or sexual maltreatment, (b) neglect, (c) witnessing family violence, (d) victimization by a sibling, (e) poor supervision, and (f) corporal punishment. The *stability* component of family relationships includes (a) whether the child lives in more than one household, (b) the number of times that

he or she has moved in the past year, (c) family adversity, and (d) hostile and inconsistent parenting (also categorized under the nurturing dimension). The *nurture* component of family relationships includes (a) emotional maltreatment, (b) warmth and involvement, (c) parent conflict, (d) hostile and inconsistent parenting, (e) parent psychological disorder, and (f) family drug or alcohol problem or both.

Results

Intercorrelations Among SSNR Factors and Trauma Symptoms

Table 1 presents intercorrelations among all safety, stability, and nurture indicators and trauma symptom scores. Substantial covariance is evident, with most factors significantly related ($p < .01$) to most other factors in the expected direction. In other words, many of these risk factors and conditions appear to cluster within families. We highlight some of the strongest significant associations.

Alcohol or drug problems were related to several forms of family-perpetrated victimization, especially witnessing family violence ($r = .26$) and child neglect ($r = .26$). Inconsistent and hostile parenting was most strongly related to parent conflict ($r = .23$), poor supervision of children ($r = .22$), and victimization by siblings ($r = .20$). Children who had moved often in the last year were also more likely to share residence across different households ($r = .34$), and these types of residential instability were most highly related to child neglect ($r = .18, r = .21$). Emotional maltreatment was strongly related to witnessing family violence ($r = .27$) as well as other forms of maltreatment, including physical or sexual abuse ($r = .25$) and child neglect ($r = .25$).

We also wished to determine the extent to which our SSNR variables were related to the level of trauma symptoms that children exhibit. As seen in Table 1, trauma symptoms were significantly related to all study variables, except parental warmth and involvement. The strongest bivariate associations were found between trauma symptoms scores and inconsistent and hostile parenting ($r = .37$), emotional maltreatment ($r = .32$), witnessing family violence ($r = .28$), and parental conflict ($r = .28$).

Regression of Trauma Symptoms on SSNR Indices

Having found intercorrelations among the SSNR variables and having established their bivariate associations with trauma symptoms, we then wished to determine the extent to which the SSNR indicators were *independently* related to children's symptoms levels and the relative strength of their effects.

Table 2 presents a series of regression analyses assessing the independent and relative effects of the SSNR factors on children's trauma symptoms, controlling for sociodemographic factors. In Model 1, trauma symptom level was regressed on all demographics and the safety indices. Each of the six safety measures was significantly related to trauma symptoms, independent of all demographic factors and the other safety variables. Witnessing family violence had the strongest association with symptomatology, followed by sibling victimization. About

Table 1. Correlations Among All SSNRs and Trauma Symptoms

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Corp punsh	Poor supervs	Phy/sx mal	Witn fam v	Juv sib v	Neglect	Incons par	Adversity	Moves PY	Live 2 + hs	Mth disord	Fath disord	Alco-drug	Warmth	Par conflict	emot mal
1. Corporal punishment	1															
2. Poor supervision	-.041	1														
3. Physical/sexual maltreatment	.009	.000	1													
4. Witnessing family violence	.053*	-.008	.194**	1												
5. Juvenile sibling victimization	-.014	.022	.039	.077**	1											
6. Neglect	-.011	-.003	.183**	.258**	.015	1										
7. Inconsistent/hostile parenting	.129**	.219**	.047*	.093**	.199**	-.038	1									
8. Family adversity	.034	.029	.091**	.112**	.019	.155**	.028	1								
9. Number of moves past year	-.004	-.001	.061**	.112**	-.046*	.181**	-.037	.138**	1							
10. Lives in 2 or more households	-.012	-.002	.114**	.157**	.039	.205**	-.006	.076**	.337**	1						
11. Mother diagnosed w/disorder	.012	-.026	.093**	.195**	.101**	.119**	.079**	.153**	.067**	.061**	1					
12. Father diagnosed w/disorder	-.025	.001	.061**	.113**	.091**	.104**	.058**	.094**	.078**	.048*	.208**	1				
13. Family drug or alcohol problem	.035	.011	.154**	.264**	.065**	.263**	.035	.143**	.054*	.136**	.180**	.180**	1			
14. Warmth/involvement	-.084**	-.054*	.003	.006	.053*	.009	-.035	.018	-.101**	-.023	.034	.003	-.002	1		
15. Parent conflict	.061**	.075**	.188**	.325**	.077**	.100**	.225**	.123**	.053*	.111**	.173**	.159**	.176**	.026	1	
16. Emotional maltreatment	.001	.015	.253**	.267**	.034	.253**	.084**	.093**	.033	.034	.132**	.143**	.199**	.023	.154**	1
17. Trauma symptom score	.077**	.132**	.183**	.283**	.192**	.135**	.370**	.181**	.137**	.090**	.192**	.147**	.189**	-.040	.282	.324**

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

Table 2. Independent Effects of SSNR Factors on Child Trauma Symptom Scores

Predictor	Model 1		Model 2		Model 3		Model 4	
	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>
Demographics								
Age	0.06	0.00	0.05	0.01	0.08	0.00	0.04	0.07
Male	0.09	0.00	0.08	0.00	0.10	0.00	0.08	0.00
Socioeconomic status	-0.03	0.23	-0.02	0.36	0.01	0.68	-0.02	0.42
Black, non-Hispanic	-0.05	0.02	-0.05	0.04	-0.05	0.02	-0.03	0.24
Hispanic, any race	-0.02	0.48	-0.05	0.03	-0.05	0.02	-0.02	0.40
Other race/mixed race, non-Hisp	0.03	0.23	-0.01	0.66	0.03	0.20	0.00	0.95
Single parent	0.06	0.01	0.08	0.00	0.06	0.01	0.03	0.13
Parent and stepparent/partner	0.08	0.00	0.07	0.00	0.07	0.00	0.04	0.06
Other adult caregiver	0.04	0.11	0.06	0.01	0.00	0.88	0.02	0.28
Safety								
Corporal punishment	0.07	0.00					0.02	0.21
Poor supervision	0.11	0.00					0.05	0.02
Physical/sexual maltreatment	0.11	0.00					0.05	0.02
Witness family violence	0.23	0.00					0.10	0.00
Juvenile sibling victimization	0.16	0.00					0.10	0.00
Neglect	0.04	0.05					-0.01	0.79
Stability								
Inconsistent/hostile parenting			0.36	0.00			0.27	0.00
Family adversity			0.14	0.00			0.10	0.00
Number of moves in past year			0.11	0.00			0.10	0.00
Child lives in 2+ households			0.00	0.92			-0.03	0.24
Nurturing								
Mother diagnosed w/psyc. disorder					0.09	0.00	0.04	0.04
Father diagnosed w/psyc. disorder					0.03	0.14	0.02	0.26
Family drug or alcohol problem					0.07	0.00	0.03	0.15
Warmth/involvement					-0.06	0.01	-0.02	0.25
Parent conflict					0.20	0.00	0.09	0.00
Emotional maltreatment					0.26	0.00	0.22	0.00
Adjusted R^2		0.169		0.203		0.213		0.325

17% of the variance in symptom levels was explained by demographics and variations in the presence of safe (or unsafe) family environments and behaviors.

Model 2 shows the analyses assessing the four stability indices. Inconsistent and hostile parenting, family adversity, and number of past-year residential moves were all significantly related to trauma symptoms independent of demographics, with inconsistent and hostile parenting having by far the strongest effect. Approximately 20% of the variance in trauma symptoms was explained by demographic factors and variations in stability. Model 3 presents the same analyses focusing on the nurture indices. All factors, except father psychological disorder, showed significant independent associations with symptoms. Emotional maltreatment and parental conflict showed the strongest effects. About 21% of the variance in symptom levels is explained by demographics and variations in family nurturance.

Given that many associations were evident across the safety, stability, and nurturing domains (see Table 1), the final model (Model 4) includes all SSNR variables in the equation. Although most SSNR indices remained statistically significant, two factors emerged as having particularly powerful independent effects: inconsistent and hostile parenting ($\beta = .27$, $p < .001$) and emotional maltreatment ($\beta = .22$; $p < .001$). It is worth noting that, except for greater symptom scores among males, all demographic differences in trauma symptoms are fully

explained by variations in our indicators of safe, stable, and nurturing family relationships. The full model explained almost 33% of the variance in children's symptoms levels.

The Cumulative Effects of Family Risk

Finally, although the earlier analyses demonstrate important independent effects of our SSNR variables, we also wished to determine the extent to which these factors may have cumulative effects on child mental health. To this end, we constructed a family risk index, representing the number of SSNR factors that were present or that fell into the high-risk end of scores. Ranging from zero to seven or more, the index value represents each respondent's cumulative risk on SSNR dimensions. The sample distribution was as follows: 14.4% had no risk factors ($n = 290$), 29.2% had one risk factor ($n = 589$), 24% scored two on the index ($n = 483$), 14.3% scored three ($n = 289$), 9.2% scored four ($n = 185$), 4.3% scored five ($n = 87$), 2.4% scored six on the cumulative risk index ($n = 49$), and 2.2% had seven or more risk factors ($n = 44$). As shown in Figure 1, there was a clear linear relationship between cumulative SSNR risk and level of trauma symptomatology, controlling for demographic factors. For the most part, trauma symptom scores become higher with each additional risk factor to which children are exposed. The difference in the mean adjusted trauma symp-

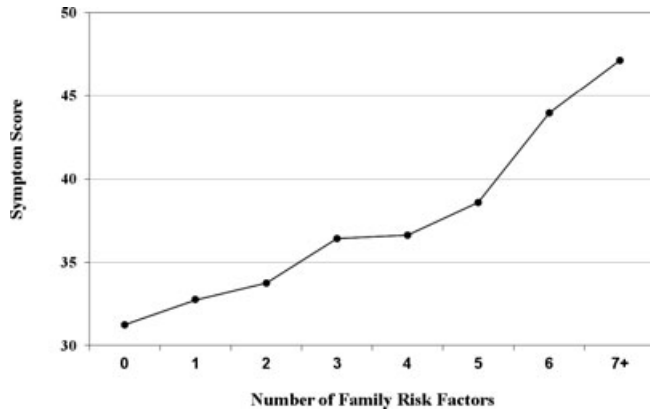


Figure 1. Estimated symptom score by number of family risk factors. Analyses control for sex, age, race/ethnicity, family structure, and SES.

tom score between the lowest and highest risk group is approximately 16 points.

Discussion

Family conditions and behaviors that denote lack of safety, poor stability, and low nurturance often co-occur to create a broad context of risk to children. Thus, risky family environments are characterized by multiple problems that arise from problematic caregiver characteristics and interactions. Consistent with earlier research (Finkelhor et al., 2007), we found that children are often exposed to multiple forms of victimization within the family, as evidenced by substantial intercorrelations across most forms of family-perpetrated victimization. Moreover, family victimization often occurs against a backdrop of parental dysfunction, family adversity, residential instability, and problematic parenting practices. Thus, there are substantial linkages not just within safety, stability, and nurturing domains, but also across these domains.

Although moderate correlations existed among most of the variables considered, some noteworthy patterns emerged. Parental dysfunction, as indexed by mother and father disorder and drug or alcohol abuse, appears to be importantly related to all forms of family-perpetrated victimization and many indicators of poor stability, demonstrating a broad level of risk associated with these problems. Therefore, although we conceptualized these aspects of parent dysfunction as indicators of poor nurturance, they appear to also play a role in compromising children's safety and in creating stressful and unstable family contexts. These findings suggest the potential utility of identifying and targeting parents who have mental health and behavioral problems for maltreatment education and intervention.

Inconsistent and hostile parenting, which (as discussed later) emerged as the strongest independent predictor of children's symptomatology, appears more common in households with high levels of parent conflict. Interestingly, it was this variable that showed the strongest association with sibling victimization, suggesting that anger and inconsistency when disciplining may encourage hostility and fighting among siblings and reduce parents' abilities to control children's behavior toward one another.

Consistent with some other research (Dubowitz & Black, 2001), residential instability appears especially relevant to exposure to child neglect in this sample. It seems likely that frequent moves and transfers across households create a chaotic family context, reducing the ability of parents to monitor, arrange for, and respond to children's basic needs. The finding that family adversity is also significantly related to child neglect is consistent with this interpretation.

In bivariate analyses, almost all the SSNR factors considered in this study were significantly associated with child symptomatology. Many of these factors also had independent effects on mental health when all other SSNR factors and demographic differences were held constant, including mother disorder, inconsistent and hostile parenting, poor supervision, family adversity, number of residential moves, parental conflict, and all forms of victimization except neglect. It is worth noting that two types of family-perpetrated victimization—victimization by siblings and witnessing family violence—categories not typically central in maltreatment research, had significant effects on symptom levels, independent of all forms of maltreatment and the other SSNR factors. These findings confirm the importance of a more comprehensive approach in assessing children's exposure to violence and victimization, even when considering only within-family exposures. Emotional maltreatment was the most powerful form of victimization assessed in these analyses. Although sometimes overlooked in maltreatment research and practice (Glaser, 2002), emotional abuse in childhood has been found to have substantial long-term effects on mental health outcomes in adulthood, even more so than physical forms of maltreatment (Chapman et al., 2004).

The variable that showed the strongest independent association with child symptomatology was the parenting variable of inconsistent and hostile parenting. The strong detrimental effects of this type of parenting behavior, together with the significance of emotional abuse, speak to the particular importance of the nurturance and stability domains of parent-child relationships. These findings are consistent with studies showing the detrimental effects of hostile and coercive parenting, especially when discipline is inconsistent and unfair, on the development of social competence and aggression in children (Dishion, 1990; Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998; Schwartz, Dodge, Pettit, & Bates, 1997). In contrast, when parents employ fair and consistent discipline—aspects of *authoritative parenting*—children's well-being and social development are enhanced (Baumrind, 1989; Brenner & Fox, 1999; Maccoby, 1983; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). The particularly powerful effects of both hostile and inconsistent parenting and emotional maltreatment suggest that rejection, anger, and denigration directed at the child may be central to the most risky family contexts. Together with unpredictable parenting behavior, these hostile conditions may be particularly likely to generate fear and to damage self-concept in young children. Children in such family environments may often grow to believe in and act out the negative attributions directed toward them (Glaser, 2002).

The current study also adds to the growing evidence that risk factors are often cumulative in their effects on child well-being. Studies that have taken a broader perspective have found that many children experience multiple risks (Masten & Coatsworth, 1998; Turner et al., 2006), and the greater number of risk

factors children possess, the higher the prevalence of developmental and mental health problems (Rutter, 1979; Sameroff, 2000). The current research also supports the cumulative risk hypothesis; even when considering only family-related risk factors, a clear linear relationship between the level of trauma symptoms reported and the number of risky family qualities and conditions was evident. Thus, specific indices of family relationships and circumstances that denote lack of safety, stability, and nurturance appear to have cumulative effects on child well-being. Future research may benefit from an even broader approach that incorporates risk factors, as well as health-enhancing resources, beyond the family context. Such research might consider how problematic neighborhood and school environments, as well as exposure to peer and community violence, combine with family characteristics to affect child well-being.

Most variables considered in this research reflect negative rather than positive sides of safety, stability, and nurturance. Although the current research cannot address this issue directly, it may be that child symptomatology is more strongly affected by conflictive interactions and adverse events and conditions than by positive relationships and circumstances. That is, the absence of toxic family contexts (rather than the presence of constructive ones) may be most important in preventing distress. This interpretation is consistent with research showing that family risk factors and poor parenting qualities are most strongly related to child mental health problems, whereas family protective factors and positive parenting better predict positive child outcomes, like social and leadership skills (Frick, 1994; Prevatt, 2003; Shelton, Frick, & Wooton, 1996). Nevertheless, future research should examine this issue directly by considering more family conditions and relationship qualities that could have more promotive and protective effects (Centers for Disease Control & Prevention, 2009; Sameroff, 2006). Thus, in addition to examining contexts that create risk for children, it is important to identify factors that have direct positive effects on well-being or that foster resiliency in the context of risk.

Additional limitations of this research should be acknowledged. First, it is possible that families in which children are exposed to family-perpetrated victimization or who exhibit other risk factors are reticent to fully disclose the nature of their behavior or are less likely to participate in community surveys. Although such underreporting or underrepresentation of child victimization can introduce bias, similar survey-based studies have demonstrated considerable willingness of caregivers to report violent and maltreating acts perpetrated by themselves and other household caregivers (Straus & Hamby, 1997; Theodore et al., 2005) and have provided evidence that caregivers do not underreport compared to other observers (Finkelhor, Hamby, et al., 2005). Second, reports of both victimization exposure and symptoms came from the same sources (caregivers), leading to a possibility of method covariance. Information from the same source can yield substantially higher correlations than information from different sources, for example, parents and child protection professionals (McGee, Wolfe, Yuen, Wilson, & Carnachan, 1995).

Conclusion

Examining aspects of caregiver-child relationships and circumstances that reflect variations in safety, stability, and

nurturance provides a useful framework for exploring the complex web of family risk and promotive factors that affect child well-being. The current study highlights the importance of considering multiple sources of family-perpetrated victimization when assessing the impact of maltreatment on children and underscores the need to incorporate other aspects of family context in such investigations. Different aspects of unsafe, unstable, and nonnurturing family environments have independent negative effects and are also cumulative in their consequences. Findings suggest that emotional abuse and inconsistent and hostile parenting are especially potent risk factors. Intervention efforts must pay attention to the quality of verbal interaction between parents and children and attempt to reduce hostile and rejecting parenting, even in the absence of physical aggression.

Keywords: children; family relationships; violence exposure; childhood victimization; child trauma; child abuse; safe, stable, and nurturing relationships

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Appendix A: Parenting Measures and Source Questions

1. Inconsistent/Hostile Parenting.

PI54. You lost control of your temper when your child misbehaved.

PI55. You felt that getting your child to obey you was a lot of trouble.

PI58. The punishment you gave your child depended on your mood.

PI59. You yelled or shouted when your child misbehaved.

PI63. You argued with your child.

FOR ALL RESPONSES USE CODING OF:

1 Never

2 Rarely

3 Sometimes

4 Usually

2. Supervision.

PI72. Your child plays outside without being watched or checked on by an adult.

PI73. Your child takes a bath or shower without being watched or checked on by an adult.

PI74. Your child is left alone in a car while you go into a store, bank, or post office.

PI75. Your child uses public restrooms without a parent or other caregiver waiting nearby.

FOR ALL RESPONSES USE CODING OF:

- 1 Never
- 2 Rarely
- 3 Sometimes
- 4 Usually

3. Warmth and Involvement.

PI42. You encouraged your child to talk about his/her troubles.

PI43. You gave praise when your child was good.

PI44. You joked and played with your child.

PI45. You gave comfort and understanding when your child was upset.

PI46. You responded to your child's feelings or needs.

PI47. You told your child that you appreciate what he/she tried or accomplished.

PI48. You were aware of problems or concerns about your child in school or daycare.

PI49. You expressed affection by hugging or holding your child.

PI50. You apologized to your child when making a mistake in parenting.

PI51. You had warm and intimate times together with your child.

FOR ALL RESPONSES USE CODING OF:

- 1 Never
- 2 Rarely
- 3 Sometimes
- 4 Usually

4. Corporal Punishment.

PI53. You spanked your child with your hand when he/she did something wrong.

PI57. You slapped your child when he/she did something wrong.

PI60. You hit your child with a belt, switch, or other object when he/she did something wrong.

FOR ALL RESPONSES USE CODING OF:

- 1 Never
- 2 Rarely
- 3 Sometimes
- 4 Usually

5. Family Adversity (past year).

Divorced in Past Year Item calculated from:

PI13. How old was your [CHILD'S AGE]-year-old when (he/she) stopped living with both (his/her) biological parents

PI14. What is your current marital status? Are you... ?

Married

Unmarried but living with a partner

Separated

Divorced

Widowed

Single (Never married)

LE1. In his/her whole life, was your child ever in a VERY BAD fire, flood, tornado, hurricane, earthquake or other disaster? This would be a time that your child's home or apartment was damaged and your child might have had to live somewhere else for a while.

LE2. Was your child ever in a VERY BAD accident (at home, school, or in a car) where your child had to go to the hospital? This would be a time that your child was very hurt and needed to spend a long time in the hospital. Has that ever happened?

LE3. Did your child ever have a VERY BAD illness where your child had to go to the hospital? This could be a time when your child was so sick that your child had to be in the hospital a lot? Has that ever happened?

LE4. Has someone your child was really close to ever had a VERY BAD accident where they had to spend a long time in the hospital? This would be someone important to your child, like a parent, brother or sister, or best friend.

LE5. Has someone your child was really close to ever had a VERY BAD illness where they had to be in the hospital a lot? Again, this would be someone important to your child, like a parent, brother or sister, or best friend.

LE8. Have there ever been any times when your child's mother, father, or guardian lost a job or couldn't find work?

LE15. Did a parent or someone who takes care of your child ever have to leave the country to fight in a war, when he or she had to be away for several months or longer?

LE16. Did your child ever have anyone close to him/her die because of an illness or an accident?

FOR ALL LE ITEMS USE CODING OF:

- 1 Yes
- 2 No

FOR ALL LE ITEMS ASK FOLLOW-UP QUESTION:

[If yes to LE XX]: Did this happen in the last year?

- 1 Yes
- 2 No

6. Parental Conflict.

CNF1. (My child) often sees (his/her) parents arguing.

CNF2. (My child's) parents get really mad when they argue.

FOR ALL RESPONSES USE CODING OF:

- 1 Very true
- 2 A little true
- 3. Not true

