

The Effects of Systemic Family Violence on Children's Mental Health

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MCCLOSKEY, LAURA ANN; FIGUEREDO, AURELIO JOSÉ; and KOSS, MARY P. *The Effects of Systemic Family Violence on Children's Mental Health*. CHILD DEVELOPMENT, 1995, 66, 1239-1261. This study examines the link between different forms of family aggression and children's symptoms of psychopathology. The goal of the study was to understand what forms children's problems might take in violent homes and whether close ties within the family (to the mother or a sibling) buffered children. Interviews with 365 mothers and 1 of their children between the ages of 6 and 12 about abuse in the home, support and closeness within the nuclear family, and mother's and children's mental health formed the basis of this study. Families were recruited from battered women's shelters and the community. We found that different forms of abuse in the home were highly interrelated and that children of battered women were at risk for child abuse. Domestic violence predicted children's general psychopathology, but we uncovered little evidence for the presence of specific sorts of disorders as a result of family dysfunction. Although mothers experiencing conjugal violence were more likely to have mental health problems, their mental health did not mediate the children's response to family conflict. Finally, there was less sibling and parental warmth in families marked by aggression, although when it was present, family social support failed to buffer children. Although the general pattern of results was consistent across respondents (mother and child), there was low agreement on symptoms of child psychopathology.

Most of the research investigating how domestic violence affects children focuses on a single dimension of family aggression. For instance, most studies of children of battered women assess only the violence against the mother that the child presumably has witnessed, without probing for other forms of abuse in the home. The large literature on child abuse and neglect typically fails to consider interparental aggression, limiting the scope of analysis to a single dimension of child-directed aggression. The neglect of interparental conflict in the study of child abuse probably masks mechanisms in child maltreatment and certainly limits

our understanding of the place of the parent-child relationship within the family as a whole. Our study seeks to investigate the relation between different forms of aggression within families to better illuminate some of the reasons for family violence, as well as the ultimate effects.

According to some estimates, at least 3.3 million children in the United States witness violence between their parents annually (Carlson, 1984). Witnessing violence is more common than directly experiencing abuse, yet its impact on children's lives has been understudied until recently. Other au-

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thors have described the relation between child and marital problems (Emery, 1982; Hetherington & Clingempeel, 1992; Margolin, 1981), but our understanding of the mechanisms underlying this interdependency remains basic. As Emery (1982) concluded in his review of the literature on marital discord and divorce, children are sensitive to conflict and discord in the family even when it is nonviolent; the degree of marital combat in the home before divorce has a more serious impact on the child's psychosocial functioning than parental separation per se. Domestic violence compounds this outcome. Jouriles, Murphy, and O'Leary (1989) found that physical abuse between parents affects children more profoundly than marital discord alone. Grych and Fincham (1990) corroborated these findings, reporting that children's behavior problems increased as a function of the intensity of the parental conflict, with interparental aggression exacting a serious toll on children's adjustment. Fantuzzo et al. (1991) observed the additive effects of verbal conflict plus physical violence on the psychosocial functioning of preschoolers. Children who saw conjugal violence as well as verbal conflict fared worse than children exposed to only verbal conflict.

Most studies assessing children of battered women report serious childhood problems including increased anxieties (Christopoulos et al., 1987), poor school performance and conduct disorders (Carlson, 1984; Hilberman & Munson, 1978), increased aggression (Christopoulos et al., 1987; Jaffe, Wolfe, Wilson, & Zak, 1986; Wolfe, Jaffe, Wilson, & Zak, 1985), lower self-esteem (Hughes & Barad, 1983), impaired social problem-solving skill (Rosenberg, 1987), and generally high levels of behavior problems and psychopathology (Fantuzzo et al., 1991; Holden & Ritchie, 1991). These effects mirror those found in directly targeted children (Cicchetti, Carlson, Braunwald, & Aber, 1987; Lamphear, 1985). Wolfe et al. (1985) uncovered comparable behavioral sequelae in children residing in a battered women's shelter and a matched comparison group of abused children. Although there is mounting evidence that witnessing aggression in the home is harmful to children, it is notable that (1) some studies unearth no such effects (Cummings, Vogel, Cummings, & El-Sheikh, 1989; Jouriles, Barling, & O'Leary, 1987); (2) even in those studies where effects emerge, many of the children appear to

be functioning normally. Porter and O'Leary (1980), in their study of children in a battered women's shelter, reported differences only among boys and only within the area of conduct disorders. Wolfe, Zak, Jaffe, and Wilson (1986), although confirming that children in battered women's shelters are more likely to have problems compared to control group children, found that conjugal violence in the home accounted for only 10% of the variance in child psychopathology.

Our study examines domestic violence and psychopathology from the child's as well as the mother's perspective. Although most prior research on how children have responded to interparental conflict has relied on maternal reports, there have been some attempts to study the effects of aggression between parents from the child's perspective as well (Emery & O'Leary, 1984; Grych, Seid, & Fincham, 1992; Herzberger, Potts, & Dillon, 1981). Emery and O'Leary (1984) discovered that children's reports of conflict before an impending divorce predicted their psychological symptoms. Grych et al. (1992) examined children's reports of the frequency, intensity, content, and resolution of interparental conflict, as well as how they interpret the problems between their parents. Children's perceptions of interparental conflict correlated significantly with their symptoms of psychopathology as reported by adults. Children's reports of conflict actually correlated to more child adjustment measures, from multiple sources, than did the parents' reports of conflict. Since children's *perceptions* were more predictive of their own psychosocial adjustment than the adults' renditions of marital discord, it appears that perceptions of conflict in the home diverge (Larson, 1994). It is possible that parents underestimate children's sensitivity to conflict, perhaps defensively, since exposing the child to conflict could be seen as inconsistent with "good" parenting. Reese and Roosa (1991) also found, in an epidemiological survey of over 700 school-aged children (fourth to sixth grades), that children's reports of family stress and parental drinking correlated significantly with their self-reports of mental health. In comparing children's self-reported symptoms to the descriptions offered by parents and teachers, Phares, Compas, and Howell (1989) uncovered moderate correlations among informants, indicating that children's self-reports at least somewhat overlap with adult perceptions. In the same way parental

conflict might be seen and interpreted differently by parents and their children, parental nurturance or the parent-child relationship might also be viewed differently (Maccoby, 1983). For instance, Michaels, Messé, and Stollak (1983) determined that the correlations between parents' and their second-graders' perceptions of parent-child interaction were low to moderate.

There are several possible reasons that children of battered women appear more disturbed in at least a significant number of studies. The most obvious one is that simply witnessing physical threats against one's mother is traumatic. Pynoos and his colleagues conducted a number of studies investigating children's responses to witnessing life-threatening violence which included the murder of their mothers (Pynoos & Eth, 1984). Virtually all of the children in these studies showed the full range of symptoms associated with posttraumatic stress syndrome, including sleep disorders, severe anxiety, phobic responses, and compulsive reenactment of the events in play. There is also experimental evidence showing that young children display distress at seeing their mothers in conflict with a confederate experimenter (Cummings, Pellegrini, Notarius, & Cummings, 1989) or viewing videotapes of adult verbal and physical confrontation (Cummings, Vogel, Cummings, & El-Sheikh, 1989). In the videotape-viewing study, children showed more distress when the conflict was violent than when it was verbal only. In a recent extension of this work, Hennessy, Rabideau, Cicchetti, and Cummings (1994) found that abused children reported more feelings of fear upon viewing videotapes of adult conflict than matched nonabused controls. One possible interpretation of this finding is that maltreated children have a more acute history of exposure to violence between their parents. While battered women frequently report trying to shield children from inter-spousal conflict, Rosenberg (1984) reports that in her interviews with children over 80% of them reported seeing and hearing the scenes of conjugal violence. Children of battered women, then, see and hear much of the conflict, and we know from recent experimental work that this experience has at least short-term adverse effects.

Another reason children of battered women sometimes appear disturbed is that they are likely to be targets of aggression

themselves (Owens & Straus, 1975), a risk that increases if they try to protect their mothers (Barnett, Pittman, Ragan, & Salus, 1980). Jouriles et al. (1987) reported that children whose mothers sought refuge in a battered women's shelter were highly likely to have been physically coerced or threatened by their fathers. Even if the children are not targets of their father's aggression, according to Holden and Ritchie (1991) abused wives view their husbands as more short-tempered, irritable, and uninvolved in parenting than comparison women appraise their husbands.

It is also possible that the effects are transmitted through the mother. That is, if there are deleterious physical and psychological consequences for the mother, she will be less equipped to care for her children. Her mental health status could adversely affect her children. Straus and Gelles (1990) report from their survey conducted in 1985 that battered wives have more sick days, are more likely to seek medical attention, are four times more likely to be clinically depressed, and are 5½ times more likely to have attempted suicide than nonbattered women. Stets and Straus (1990) also report that women report more symptoms of depression as a function of the level and intensity of spousal violence. Other studies (Wolfe et al., 1985) have reported that battered women report many more stressors than nonbattered women, which also might interfere with their parenting. However, the degree to which the effects of interparental conflict is mediated through the mother's parenting remains uncertain (Emery, Fincham, & Cummings, 1992). Holden and Ritchie (1991) reported that battered women have higher scores on the Parenting Stress Index than comparison mothers, but they found no between-group differences in their child-rearing practices. On the other hand, if it is true that battered women are more likely to be depressed, one might expect their children to have elevated symptoms based on prior research linking maternal depression to early signs of maladjustment among toddlers and preschoolers (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985).

Although much of the research on domestic violence focuses on the violence per se as the independent variable affecting the child, it is likely that this violence is actually an expression of underlying family dysfunction.

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tion even more profound than the acts of violence themselves. It is possible, therefore, that a final reason children from violent homes appear more disturbed is that they receive less support and nurturance from adults. Garnezy (1983) has suggested that two forms of social support benefit children at risk. These forms of support include positive relationships within the family, especially with one or both of the parents, and support networks outside of the family. Wolchik, Ruehlman, Braver, and Sandler (1989), for instance, concluded that children of divorced parents fare better when they receive incremental support from both family and nonfamily members. Emery (1982) also emphasized that a child's close relationship to one of the parents in a divorce can serve as a "buffer" in adjustment. It is conceivable that children of battered women are less able to form these close relationships, in part because their fathers are unlikely to play a supportive role in child rearing, and because their mothers have fewer psychosocial resources for them. On the other hand, it is also possible that a close relationship to the mother in particular might be a protective factor for the child, where both the mother and child form a mutual alliance against a threatening and coercive father.

The specific goals of our study were to assess (1) the interrelation between different forms of abuse within the family; (2) the effects that family aggression has on children from both their own and their mothers' perspectives; and (3) whether supportive features of parent-child and sibling affiliation serve to "buffer" the children from the effects of severe family conflict, or whether such support is reduced in violent families.

Method

Participants

We interviewed a total of 375 women and one of their children, 365 of whom were included in the final analysis because of extensive missing data from either the child or mother interviews in 10 of the cases. While most studies of battered women and their children have relied exclusively on families from shelters, thereby limiting their generalizability, we recruited battered and nonbattered women from a large number of independent sources to avoid bias in our sample. Battered women were recruited in two ways: (1) from battered women's shelters ($n = 64$) and (2) from community sources

where they were screened for the presence of violence in the home in the year prior to the interview ($n = 102$). In the case of battered women from the community, we canvassed over 150 establishments (social service agencies, churches, clinics, stores) and advertised through local radio, newspapers, and shoppers' guides asking for women who had experienced "abuse from a partner in the last year" to call us. In order to recruit our comparison sample ($n = 199$), we removed the original posters replacing them several weeks later with new fliers listing a different telephone number, soliciting women with children between the ages of 6 and 12 years of age to participate in a "study on the family," making no mention of family or partner violence. We ensured that no woman who responded to the above poster was interviewed again.

We interviewed one child from the family who lived with the mother over the past year and was between 6 and 12 years old (mean age = 9.2 years, $SD = 1.95$). After eliminating those children in the family with chronic medical problems, hospitalization over 2 weeks in the last 2 years, developmental delay, genetic disabilities, or prematurity or serious birth complications, we selected children alternately male ($n = 183$) or female ($n = 182$), without taking the recommendation of the mother in those cases where another sibling qualified. In several cases where another sibling was unqualified or unavailable (55 children had no siblings), we took children with a history of prematurity or birth complications without profound medical sequelae. However, fewer than 2% of the children in our study were born premature, a figure unrepresentative of the general population at large.

The mothers were on average 33.1 ($SD = 5$) years old. The average number of children in the home was 2.9 ($SD = 1.3$). The predominant ethnic identification of the women and their children was Anglo-European (53.4%) and Mexican American (35.1%). African Americans composed 5.5% of the sample, and Native Americans 4.4%. The remaining 1.6% of families included Asians, Pacific Islanders, and other (unclassified) families. Twenty-three percent of the mothers were employed full-time outside of the home, with another 18% employed part-time. Seventy-four percent of the partners were employed either full- or part-time. The mean (gross) monthly family income was \$1,403.00, although the median was

\$1,200.00, only slightly above the poverty threshold for a family of four (\$1,117) established by 1992 federal guidelines (Arizona Department of Economic Security). Fifty-four percent of the fathers in the sample were biologically related to the children, 27% were stepfathers, and the remaining 19% were biologically and legally unrelated. The mean duration of the relationship was 9.4 years ($SD = 5.9$).

Procedure

After the telephone intake, families were scheduled for a 2–3-hour interview, and the mother and target child were interviewed simultaneously by two different female interviewers. All Hispanic women were interviewed by Hispanic, Spanish-speaking interviewers, and interviews were conducted in Spanish when preferred. We interviewed approximately 13% of the women and fewer than 3% of the children in Spanish. Interviewers were blind as to whether the mothers or children were from violent homes until the last segment of the interview, after the assessment of mental health and social support, except in the case of shelter families, where interviewers went to the shelters to talk with families. Families were compensated \$45.00 for the interview, and children received a \$5.00 McDonald's gift certificate.

Because of the sensitive nature of the interview questions, informed consent included a statement that if it were revealed during the session that the child had been harmed, the interviewers would contact authorities. Only two families took the option of ending the interview at that point. Our staff counselor confirmed with Child Protective Services whether child abuse reported during the interview had been previously reported and a complaint filed. We filed 28 new reports to Child Protective Services over the course of the study, all but one with the mother's full cooperation. Because of the necessity to report child abuse and warn families of possible reporting, we believe that our statistics on child-directed aggression underrepresent the real prevalence. We hired a full-time experienced counselor to provide short-term individual counseling for families in need, a weekly drop-in group for the mothers, and needed referrals to various local agencies for follow-up support.

Measures

Measures were selected to assess the amount of aggression and abuse in the fam-

ily, the mental health of the mother and child, and the positive qualities of affiliation and social support within the family. All instruments were translated and pretested by a native Spanish speaker professionally experienced in translation and research. It should be noted, however, that except for the Child Assessment Schedule, with orthogonal questions about child psychopathology for the parent and child, the questions about family conflict and aggression were either worded differently sometimes for children, or the total number of questions addressed to the mother or child was different. Even though some instruments were originally designed as questionnaires, we administered all measures orally since we had concern about literacy for some proportion of our adult as well as child sample.

Child Psychopathology

The mothers received two measures of child psychopathology, the Child Behavior Checklist (Achenbach & Edelbrock, 1983) and the Child Assessment Schedule (Hodges, 1986). With the Child Behavior Checklist (CBCL), parents rate how applicable 113 symptoms are to their child on a three-point scale. Norms have been established on the reports of 1,300 randomly selected parents about their children (Achenbach & Edelbrock, 1981), and psychometric properties are described in detail elsewhere (Achenbach & Edelbrock, 1983; Achenbach & McConaughy, 1987).

The Child Assessment Schedule (CAS) is a 1-hour structured diagnostic interview designed for epidemiological mental health research with orthogonal versions for both mother and child (Hodges, 1986). The CAS has been standardized on over 2,000 children and has excellent concordance with other psychodiagnostic instruments (Hodges, McKnew, Burbach, & Roebuck, 1987). Hodges and Saunders (1990) report high internal consistency of the items on nine of the subscales. Finally, Hodges, Cools, and McKnew (1989) report coefficients above .80 for test-retest reliability on all subscales. One positive feature of the CAS is that it includes nontarget (distractor) questions, unrelated to pathology, that set a more agreeable tone and reduce the tedium. These items also help to mask the decision tree protocol interviewers rely on to determine whether to continue with a line of questioning. In summary, the CAS is among the best structured psychiatric interviews for

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children, with well-researched psychometric properties. We asked all questions on the original CAS except the last several concerning severe psychosis, because of the low base rate and the fact that in all probability such children would have been excluded during the telephone screening from our study. In our own study, we cross-validated the total symptom scores of the CAS (Hodges) with the CBC (Achenbach), finding that the two measures are correlated above .88.

In order to assess reliability, Hodges provides five training videotapes (with code-books) showing complete interviews with five different child subjects. All of our 13 interviewers viewed the five videotapes, coding the subjects' responses as if they were interviewing. These data were analyzed for reliability according to Generalizability Theory (Cronbach, Gleser, Nanda, & Rajaratnam, 1972; Shavelson, Webb, & Rowley, 1989), a framework for systematically correlating relations between different variables and subsets. Common approaches to establishing reliability (e.g., Cronbach's alpha or Cohen's kappa) typically perform one set of correlations at a time, failing to control for potential variance due to another factor in the design, for example, in our study the variance contributed by the actual videotapes. Generalizability Theory takes into account the variance from different sources of error when computing alpha coefficients, permitting a more accurate estimate of reliability. For instance, in the present analyses, we have sources of error due to individual raters (the 13 interviewers), tapes (five), the actual rating of the different subscales of the Child Assessment Schedule, and the degree of discrepancy between the raters and the expert. In addition, while Cohen's kappa examines item by item agreement, we decided to preserve only the agreement on subscales (i.e., dysthymia or oppositional disorder), which has more relevance to validity in clinical diagnosis.

We analyzed both the reliability of the raters with the expert (Kay Hodges), and the interrater reliability, including in our analyses the variance accounted for by tapes and by subscales, as well as standard of comparison (expert vs. other raters). We first inspected interrater reliability between the single expert rater (Kay Hodges) and the mean of all the 13 novice raters modeled as a group. We estimated that the Subscales* Tapes*Expert generalizability coefficient was .923, indicating a high level of agree-

ment across tapes between our interviewers and Kay Hodges. The second coefficient applies to the interrater reliability among our 13 novice raters, modeled as individuals within that group. This Subscales*Tapes*Raters coefficient was .886. These findings indicate that well-trained lay people can administer the Child Assessment Schedule effectively.

Maternal Psychopathology

Mothers received the Brief Symptom Inventory (Derogatis & Melisaratos, 1983), again administered in interview rather than questionnaire format, to assess their current mental health. The Brief Symptom Inventory is a 50-item questionnaire designed to assess adult mental health, with symptoms (experienced only within the last week) ranging from insomnia to suicidal ideation and auditory hallucinations. Derogatis and Melisaratos (1983) report high validity with clinical assessments and test-retest reliability, along with other psychometric properties. Although there are designated subscales, for purposes of our study we used the overall symptom index.

Within-Family Support

Both mothers and children received different measures to assess warmth and support (both emotional and instrumental) between family members. We asked children about how they perceived both parents. We asked mothers about how they expressed warmth and discipline to their children as well as about the target child's receipt of support from her or his sibling closest in age. Children were asked 18 questions about parental warmth and support derived in part from the Parent Perception Inventory, developed by Hazzard, Christensen, and Margolin (1983). Children rate their parents on a five-point Likert scale on dimensions of warmth and criticism, or "positive" and "negative" parenting. The authors report that Cronbach alpha reliability coefficients range from .78 to .88, and convergent validity indicates correlations between items on the Parent Perception Inventory and the child's self-esteem and parental perceptions of child conduct disorder. We included additional, original items to tap affection, positive regard, and attunement between the parent and child according to the child's perspective.

Seven of the items from the above questionnaire were asked about the fathers as well. In addition, we asked whether the children wanted to grow up to be like their fa-

thers, and whether their fathers were in a good mood or were strict with them because they were in a "bad mood" some of the time. Items describing the child's relationship to both parents were factor analyzed for instrumental versus emotional forms of support. Although there was evidence for separate factors on this dimension, the items were highly collinear.

The Parental Authority Questionnaire, administered to the mothers about their own parenting, is derived from Buri (1989) and taps those dimensions of parental behavior first outlined by Baumrind (1971) in her monograph of parenting styles. She proposed that there are two distinct styles, "authoritarian" (strict and uncompromising) and "authoritative" (the parent is in control but includes the child in decision making and explains instructions or requests). Test-retest reliabilities reported by Buri (1989) ranged from .77 to .94, with an alpha coefficient for internal consistency of items within different subscales from .82 to .87. Buri, Louiselle, Misukanis, and Muleer (1988) also provided evidence for external validity of the instrument, showing that adolescent self-esteem could be predicted by parental authoritarianism.

Finally, we administered questions to the mother from Graham-Berman's (1989) Brother-Sister Questionnaire about the support exchanged by the target child and his or her sibling closest in age. For the present analysis, we included only those items tapping support, rather than conflict.

Family Conflict

We used items from the Conflict Tactics Scale (Straus, 1979) for spousal and parent-child verbal and physical aggression, deleting the four "problem-solving" questions. Although Straus (1979, 1990) confirmed essentially two factors of family conflict, verbal and physical, we posited that violence in the home takes several forms, including verbal and physical abuse, but extending to sexual abuse (marital rape or child sexual abuse) and what we term "escalated" violence (life-threatening forms of aggression, such as scalding or severely beating children, or threats to kill or seriously harm the mother or children). Mothers received a long list of questions about abuse received from her partner "at any time in the relationship": 10 about verbal abuse, six about physical, 10 about escalated, and two about sexual abuse (see Table 3). In addition, she responded to two items about the partner's verbal abuse

to the child (yelled, insulted), seven about his physical abuse of the child (threw child, pushed, threw object at child, slapped, hit with object, spanked child or sibling, other acts of violence to child or sibling spontaneously offered by the mother not on the inventory), five about his escalated abuse (hit with fist, beat, burned, threatened with weapon, and injured the child to the point that medical attention was required), and one question about his sexual abuse. The mother also reported on her own acts of coercion or abuse toward the target child. Seven of these questions focused on verbal criticism and authoritarianism (from the mother's self-report on the Parental Authority Questionnaire), and two on her use of physical punishment.

We asked the child about the father's verbal, physical, and escalated aggression toward the mother (nine items) and toward the child or siblings (11 items) (see Table 4). We also asked the child about verbal, physical, and escalated aggression on the part of the mother toward the child (13 items). The items assessing father to mother aggression were as follows: "How often in the last year has your father ever [yelled at, pushed, slapped, hit, hit with an object, kicked, beat, choked or tried to kill, threatened with knife or gun, or seriously hurt] your mother?" Among the items assessing parent to child aggression were: "How often does your [mother, father] do any of the following things to you or your brothers or sisters: insults, pushes, slaps, hits with an object, kicks or hits with fist, burns. . . ." Although we used Straus's response scale of 0-6 in the interview, we protracted these scores during our analyses to estimate the mean real number of times (0-20) family members received some form of violence.

We also asked the children whether they had been sexually molested, by asking two converging questions with probes about where the incidents took place and who was involved: "How often has an older person touched you in ways you didn't like, or hugged you too hard in private, or tried to touch you under your clothes?" and "How often has an older person gotten on top of you or made you lie down so they could get on top of you?" In the case of a positive response to either of these questions, further follow-up questions were asked to determine the participants, location, time, and specific details of the incident. We therefore obtained information about both incest and extrafamilial sexual abuse. The children had

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to offer further supporting information indicating sexual abuse by someone more than 5 years their senior, noted in the written portion of the interview, in order for a positive value to be entered.

Results

Statistical Analyses

The first goal of our analyses was to describe the aggression in the home and the relation of such patterns to children's mental health. Because we sampled battered women differently, some from shelters and some from the community, we first examined whether there were important differences between these two groups. There were few significant demographic differences between battered women from shelters and battered women from the community. Community battered women were more likely to be employed and were more likely to have completed high school than women in shelters. However, these women were otherwise indistinguishable on ethnic group membership, marital status, number of children in the home, age of the mother, birth complications of the child, age of the child, and, most important, the amount of violence directed toward the mother. Families from the comparison sample had a higher income than battered women from either shelter or outreach groups but, in other respects, were similar to the community sampled battered women. Our strategy involved collapsing the three sampling groups because to run meaningful path analyses or regressions we need to have sufficient variability in our sample on the dimensions of family conflict and children's mental health. It makes little sense to run a within-group regression with family violence as the independent variable, when there is so little variability between violent families on the levels of abuse.

Family Conflict

Tables 1 and 2 display the mean scores and standard deviations of the battered women (shelter and community collapsed) and comparison group on sample items tapping abuse. To illustrate how brutal the scenes of conjugal violence were, 62% of the women reported being choked at least once, and 69.5% beaten, with 28% of the women receiving more than 15 beatings. More children witnessed displays of violence by their fathers than experienced it directly, but most of the children in the total sample reported being slapped and more than a third were

hit with an object at least once. When we compared rates of family aggression between our at-risk families and our comparison families, we discovered that even among our control group there was a fairly high rate of spousal and child-directed aggression. Predictably, children from the battered mother samples were exposed to more frequent and various forms of abuse than children from the comparison group. It is notable, however, that corporal punishment of the children in both groups is nearly comparable and that a notable proportion (about 20%) of the comparison women also had experienced violence from their partners.

The rates of severe forms of child abuse, such as sexual or escalated, were lower than verbal and physical. All but one case of within-family sexual abuse occurred in families screened for the presence of spousal violence. In other words, wife battery posed a significant risk factor for incest. The overall rate of reported paternal sexual abuse in the families screened for the presence of violence was 3.6% according to the mothers and 1.8% according to the children. However, the mothers also reported that they believed their partners had had sex with another child in the family in an additional 6% of the cases. Incest, either social or biological, is going on therefore in almost 10% of families with men who beat women. One striking finding was the large number of children of battered women who were sexually abused outside of the home. According to the mothers, 25% of the target children had been sexually molested outside of the home, with 9% of the children reporting extrafamilial sexual molestation. These reports contrast with those from comparison families, where 9.5% of the mothers believe the target children to have been sexually victimized outside the home, and 6.5% of the children describe instances of sexual abuse. These findings suggest that children from violent homes are exposed to more general serious risks outside of the family as well as within it.

Potentially lethal and escalated forms of child abuse are also rare in comparison families, with 2% of the children reporting that their fathers or stepfathers had burned them, and only one mother confirming that their partner had burned the target child in the last year. However, 10.8% of the children of battered women confirmed being burned at least once by their father, although only 1.2% of the battered women report that their partner ever burned the target child.

TABLE 1

MEAN SCORES AND STANDARD DEVIATIONS OF SAMPLE ITEMS FROM THE FAMILY CONFLICT INVENTORY: MOTHER'S REPORTS

VARIABLES	GROUPS	
	Battered, Shelter and Community (n = 166)	Comparison (n = 199)
Partner to mother:		
Threatened to harm children	7.0 (8.1)	1.7 (4.8)
Pushed or grabbed	12.7 (7.2)	3.7 (6.2)
Slapped	8.4 (7.9)	2.0 (4.9)
Beat	6.8 (8.1)	1.0 (3.6)
Choked	4.2 (6.8)	.54 (2.2)
Threatened with weapon	2.9 (5.9)	.51 (2.6)
Partner to child:		
Slapped	6.7 (7.4)	5.7 (7.1)
Hit with object	3.2 (6.0)	1.8 (4.6)
Beat	1.3 (3.8)	.43 (2.1)
Burned .....	.01 (.11)	.005 (.07)

NOTE.—Mean scores equivalent to the mean number of times (0–20+) in the last year the respondent reported receiving this form of abuse.

Measurement Models

Unlike most studies of family violence that compute mean total scores for each set of related items, we initially treated all questionnaire items relating to conflict as separate variables. This procedure gave us more insight into the different types of aggression by and upon different family members. Using covariance matrices, items were tested for convergent validity using EQS (Bentler,

1989). Lower-order factors of different forms of abuse (verbal, physical, escalated, and sexual) were constructed for all the rationally derived subscales by confirmatory factor analysis. All subscale factors were entered as manifest variables for both higher-order confirmatory factor analysis and multivariate analysis within a single structural equations model.

TABLE 2

MEAN SCORES AND STANDARD DEVIATIONS OF SELECTED ITEMS FROM THE FAMILY CONFLICT INVENTORY: CHILD'S REPORTS

VARIABLES	GROUPS	
	Battered, Shelter and Community	Comparison
Partner to mother:		
Pushed or grabbed	7.1 (7.7)	1.7 (4.3)
Slapped	4.5 (6.9)	.87 (3.2)
Beat	4.0 (6.7)	.58 (2.6)
Choked	2.3 (5.6)	.24 (1.7)
Threatened with weapon	1.9 (4.9)	.16 (1.2)
Partner to child:		
Slapped	6.1 (7.4)	5.7 (7.4)
Hit with object	4.2 (7.03)	3.4 (6.2)
Burned .....	.57 (2.9)	.07 (.65)
Mother to child:		
Slapped	3.7 (5.8)	5.8 (6.7)
Hit with object	2.0 (4.7)	3.0 (5.7)
Burned .....	.19 (1.6)	.07 (.49)

NOTE.—Mean scores equivalent to the mean number of times (0–20+) in the last year the respondent reported receiving this form of abuse.

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Lower-order factor models.—Separate lower-order factor models for the mothers and children were constructed for the verbal, physical, escalated, and sexual subscales of interpersonal family aggression and separately confirmed a priori for each dyad (i.e., partner to mother, partner to child, and mother to child). We found support for this lower-order factor structure, depicted in Tables 3 and 4, according to both the mother's and child's reports. In addition, we confirmed factors for the emotional and instrumental subscales of family social support and for the subscales of the Child Assessment Schedule (see Tables 5 and 6). The chi-square values for these lower-order models were statistically significant, indicating that the factor models do not perfectly predict all the covariances between the items. However, all three of the practical indices of fit (NFI, NNFI, and CFI) for each of these models were highly acceptable, exceeding .90 (Bentler & Bonnett, 1980). Tables 3 through 6 display the factor patterns for each of these lower-order factor models. All factor loadings are expressed as standardized regression coefficients (β weights). Tables 3 and 4 show the factor loadings of individual items of aggression from the partner to the mother, partner to the child, and mother to the child from the mother's and child's perspective. The factor loadings are acceptable and support the notion that there are different forms of aggression within these relations. That is, verbal, physical, escalated, and sexual forms of aggression are separable and to some extent distinct.

Table 5 shows the factor loadings for items we hypothesized tapped emotional and instrumental support from the mother, father, or sibling to the child. More items are available describing maternal than paternal support. Finally, Table 6 shows the factor loadings for the subscales of child psychopathology as measured by the Child Assessment Schedule and Child Behavior Checklist. The only two subscales with insignificant factor loadings are enuresis and encopresis. This finding indicates that children's emotional problems are unrelated to a lack of bladder or bowel control in our sample. We factor analyzed all measures of children's mental health, as assessed from both the mother's and child's perspectives, according to the a priori factors or subscales recommended by the authors of the instruments. For the mothers' reports, the separate factors for the CAS and the CBCL were then further factor analyzed, to obtain a general

factor of child psychopathology, consolidating the common features of both instruments.

Higher-order factor models.—Higher-order factors were confirmed for all the subscales under each dyadic facet of both family violence and family social support. Figure 1 displays the family violence measurement model for these higher-order factors according to the mother's and child's reports. Factor loadings are expressed as standardized regression coefficients (β weights) for the pathways. The coefficients reveal that different forms of aggression within the family are highly collinear within both mother and child reports with the exception of child sexual abuse, that loads nonsignificantly on the general factor of partner to child violence. This finding indicates that sexual abuse occurs in the absence of physical and verbal abuse and vice versa. Child sexual abuse appears to contrast with the mother's report of sexual abuse in her relationship; among adults, rape co-occurs with other forms of violence.

One alarming result of these factor models is the high factor loading of escalated violence with other forms of aggression. It appears likely that a battered woman will receive death threats, and somewhat less likely that a battered child will experience life-threatening violence from his or her father according to the mother's report. The children's report of escalated paternal abuse also covaries with their reports of other forms of abuse. Escalated aggression from the mother has a lower factor loading with verbal and physical abuse than when it springs from the father.

The dimensions of instrumental and expressive or emotional social support were confirmed as well for the factors of sibling to child support as reported by the mother, with loadings of .58 for each dimension. Emotional and instrumental support also made up the two confirmed dimensions of social support factors provided by either parent to the target child, with factor loadings close to .70.

Structural Equation Models

These relationship-specific factors were integrated into a single, unitary higher-order family violence factor for the separate reports of the mother and child. Table 7 displays the statistical and practical indices of fit for all the nested higher-order structural equation models. Although the chi-square values for these models were statistically

TABLE 3

FACTOR LOADINGS FOR FAMILY AGGRESSION BY RELATIONSHIP: MOTHER'S REPORTS

	AGGRESSION FACTORS			
	Verbal	Physical	Escalated	Sexual
Partner to Mother:				
Angry arguments .....	.53	...	...	...
Considered leaving .....	.60	...	...	...
Criticized .....	.67	...	...	...
Mother felt ignored .....	.61	...	...	...
Insulted .....	.72	...	...	...
Refused to talk .....	.62	...	...	...
Stomped out .....	.68	...	...	...
Said things for spite .....	.80	...	...	...
Invaded privacy .....	.66	...	...	...
Threatened to harm children .....	.53	...	...	...
Threatened to hit/throw things .....	...	.83	...	...
Threw/smashed object .....	...	.80	...	...
Threw object at mother .....	...	.80	...	...
Pushed or grabbed .....	...	.84	...	...
Slapped .....	...	.84	...	...
Hit with object .....	...	.91	...	...
Kicked .....	...	...	.92	...
Beat for a number of minutes .....	...	...	.89	...
Choked .....	...	...	.74	...
Threatened with weapon .....	...	...	.52	...
Used knife/gun against mother .....	...	...	.28	...
Harmed or killed pets .....	...	...	.12	...
Threatened to kill mother if she left .....	...	...	.54	...
Ripped/destroyed clothes .....	...	...	.80	...
Burned .....	...	...	.15	...
Violence duration .....	...	...	.43	...
Forced sexual intercourse .....	...	...	...	.75
Forced oral/anal sex .....	...	...	...	.87
Partner to child:				
Yelled .....	.83	...	...	...
Insulted .....	.84	...	...	...
Threw child .....	...	.68	...	...
Pushed or grabbed .....	...	.81	...	...
Threw object at child .....	...	.49	...	...
Slapped .....	...	.51	...	...
Hit with object .....	...	.68	...	...
Spanked child or siblings .....	...	.65	...	...
Other aggression to child or sibs .....	...	.32	...	...
Hit with fist .....	...	...	.60	...
Beat/bruised .....	...	...	.62	...
Burned .....	...	...	.21	...
Threatened with weapon .....	...	...	.47	...
Child or sibling saw doctor for injuries .....	...	...	.31	...
Had sex with child or siblings .....	...	...	...	1.0
Mother to child:				
Point out mistakes/critical .....	.62	...	...	...
Tell not to do things .....	.25	...	...	...
Punish .....	.15	...	...	...
Yell/get angry .....	.59	...	...	...
Child hard to control .....	.83	...	...	...
Mother frustrated with child .....	.79	...	...	...
Tell child to obey authority .....	.26	...	...	...
Physically punish child .....	...	.44	...	...
Hardest punished child .....	...	.36	...	...

TABLE 4

FACTOR LOADINGS FOR FAMILY AGGRESSION BY RELATIONSHIP: CHILD'S REPORTS

	AGGRESSION FACTORS			
	Verbal	Physical	Escalated	Sexual
Partner to mother:				
Yelled	1.00	...	...	...
Pushed or grabbed .....	...	.89	...	...
Slapped .....	...	.86	...	...
Hit with object .....	...	.79	...	...
Kicked .....	...	...	.81	...
Beat for a number of minutes .....	...	...	.86	...
Choked .....	...	...	.78	...
Threatened with weapon .....	...	...	.74	...
Mother seriously hurt .....	...	...	.76	...
Partner to child:				
Yells .....	.83	...	...	...
Won't explain things .....	.20	...	...	...
Ignores child when child speaks .....	.34	...	...	...
Strict rules .....	.29	...	...	...
Insults/swears at child .....	.75	...	...	...
Yells if in bad mood .....	.65	...	...	...
Pushes .....	...	.75	...	...
Slapped .....	...	.65	...	...
Hit with object .....	...	.67	...	...
Kicked .....	...	...	.63	...
Burned .....	...	...	.40	...
Touched under clothes privately .....	...	...	...	.23
Got on top of child .....	...	...	...	.89
Mother to child:				
Scolds for crying .....	.48	...	...	...
Ignores child when child speaks .....	.34	...	...	...
Told child doing things wrong .....	.56	...	...	...
Called child stupid or bad .....	.40	...	...	...
Afraid of mother .....	.43	...	...	...
Strict rules .....	.36	...	...	...
Insults .....	.27	...	...	...
Yells at child when in bad mood .....	.35	...	...	...
Pushes .....	...	.40	...	...
Slaps .....	...	.73	...	...
Hit with object .....	...	.60	...	...
Kicked .....	...	...	.45	...
Burned .....	...	...	.61	...

significant, indicating that the models do not perfectly predict all the covariances between the subscales, the three practical indices of fit for all these models were highly acceptable for practical purposes. The "difference" statistical and practical indices of fit indicate the relative loss of fit of the model to the data entailed by the elimination of the nonsignificant pathways (Hoyle, 1991; James, Mulaik, & Brett, 1982). These difference tests are both statistically nonsignificant and negligible for practical purposes, indicating that the "restricted" models perform nearly as well as the "inclusive" models in predicting the observed covari-

ances. Therefore, the restricted models are to be preferred based on the principle of parsimony.

Figures 2 and 3 display these two models, with factor loadings and pathways expressed as standardized regression coefficients (β weights). Both models show clear, direct effects of family violence on children's mental health. Furthermore, family social support had no direct residual effect on psychopathology (of either the mother or child). There were no residual correlations between different forms of family support or violence, except in the case of partner-to-

TABLE 5
FACTOR LOADINGS FOR FAMILY SOCIAL SUPPORT

MOTHER'S REPORTS	EMOTIONAL		INSTRUMENTAL	
	Mother	Sibling	Mother	Sibling
Explains why rules to child .....	.28	...	...	...
Explains mistakes .....	.48	...	...	...
Explains events .....	.66	...	...	...
Watches TV with sib .....	...	.60	...	...
Plays together .....	...	.65	...	...
Lends sib money .....	...	...	...	.54
Takes care of sib .....	...	...	...	.67
Protects sib from kids .....	...	...	...	.72

CHILD'S REPORTS	EMOTIONAL		INSTRUMENTAL	
	Mother	Father	Mother	Father
Hugs you .....	.56	...	...	...
Says nice things about you .....	.75	...	...	...
Tells you likes what you did .....	.66	...	...	...
Talks about things with you .....	.58	...	...	...
Laughs with you .....	.33	.65	...	...
Explains why rules .....	.40	...	...	...
Explains events to you .....	.39	.59	...	...
Loves you .....	.45	.65	...	...
In a good mood .....	...	.56	...	...
Does things with you .....	...	...	.48	1.0
Helps with hard tasks .....	...	...	.39	...

TABLE 6
FACTOR MODELS FOR CHILD PSYCHOPATHOLOGY

DIAGNOSTIC CATEGORY	RESPONDENT		
	Mother (CBC)	Mother (CAS)	Child (CAS)
Aggression .....	.92	...	...
Attention deficit (hyperactivity) .....	.93	.82	.74
Conduct disorder (delinquency) .....	.76	.63	.61
Depression .....	.94	.91	.87
Major depression .....	...	.68	.66
Dysthymia .....	...	.77	.69
Encopresis .....	...	.08	.12
Enuresis .....	...	.25	-.08
Immature .....	.84	...	...
Obsessive-compulsive .....	.86	.51	.43
Oppositional disorder .....	...	.73	.81
Overanxious disorder .....	...	.77	.76
Phobias .....	...	.64	.58
Schizoid .....	.86	...	...
Separation anxiety .....	...	.66	.62
Somatic .....	.66	...	...
Uncommunicative .....	.87	...	...
Withdrawal .....	.78	...	...

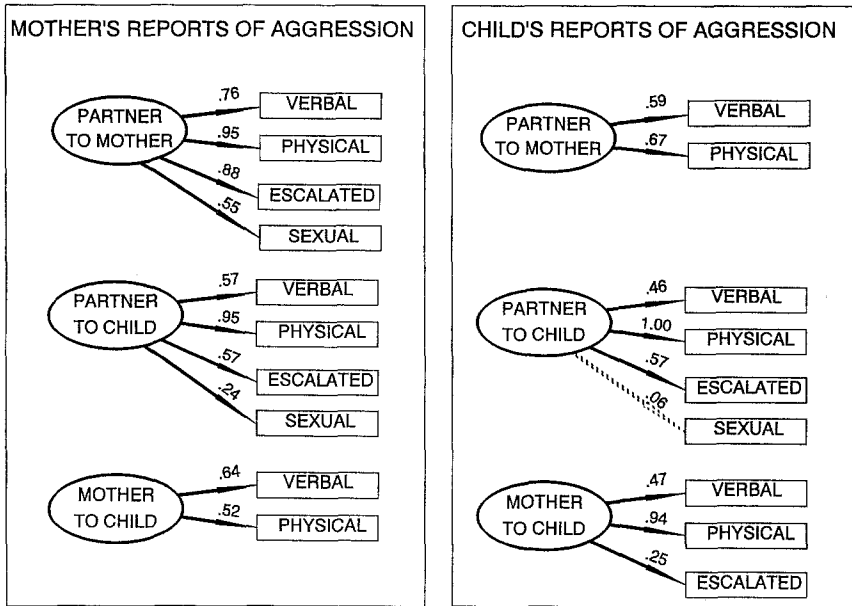


FIG. 1.—Measurement model of family aggression: Mother’s and child’s reports

mother and partner-to-child violence. Both models revealed a low intercorrelation between these two forms of father-generated aggression.

We constructed a missing data dummy variable to control for any systematic “missingness” bias for the 122 children who did not receive the Child Assessment Schedule because they were too young (under 8 years of age). The same strategy was used with those 55 children who had no siblings and therefore had systematically missing sibling relationship data from the mothers. This procedure permitted testing for any systematic deviation from the mean scores attributable to the “missingness” itself (Cohen & Cohen, 1983). The dummy variables, coded for this condition of “missingness,” were entered

into the structural models and assessed for any systematic effects upon other variables.

Just as the overall reports of the child’s mental health and family aggression correspond (loosely), the relations between family violence and child psychopathology, as well as the role of buffers (e.g., family social support) are similar when comparing mother’s and child’s reports. However, although the general pattern of results is symmetrical, there are some differences. For instance, while the general factor of social support appears unrelated to family violence according to the mother’s report, the children apparently perceive less parental support in families elevated in family violence. In examining the factor loadings of violence within different relationships to the general

TABLE 7

STATISTICAL AND PRACTICAL INDICES OF FIT FOR NESTED STRUCTURAL EQUATION MODELS

CODES	DF	.CHI ²	.NFI	.NNFI	.CFI
Restricted _M	117	355.911**	.984	.988	.989
Inclusive _M	108	342.737**	.985	.987	.990
Difference _M	9	13.17	-.001	.001	-.001
Restricted _C	88	295.61**	.967	.972	.977
Inclusive _C	83	294.08**	.967	.970	.976
Difference _C	5	1.52	.000	.002	.001

NOTE.—The subscripts *M* and *C* indicate whether the model is based on either the mother’s or the child’s reports.
** *p* < .001.

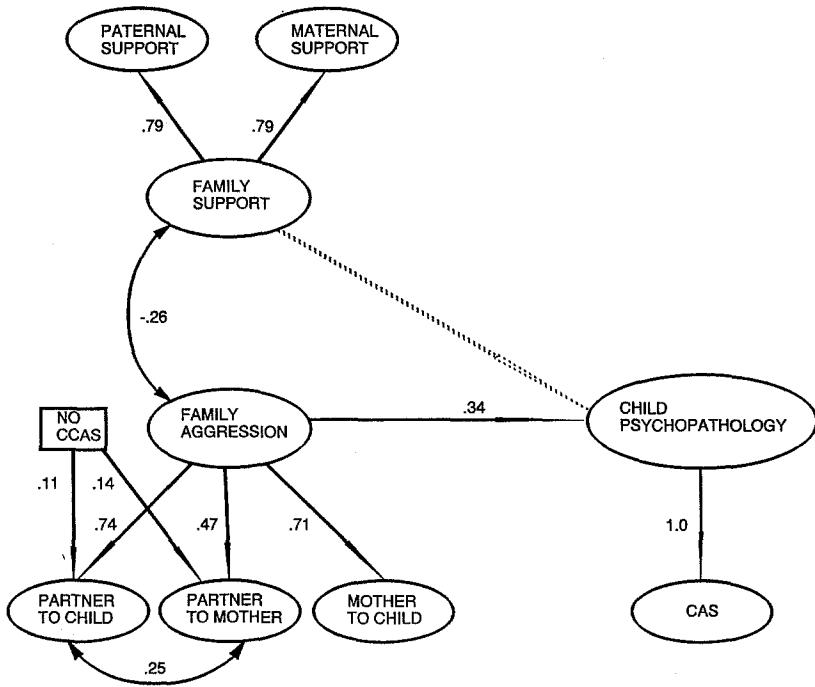


FIG. 2.—Structural equations model of the effects of family aggression on children’s psychopathology: Children’s report. The dotted line represents a tested but nonsignificant pathway.

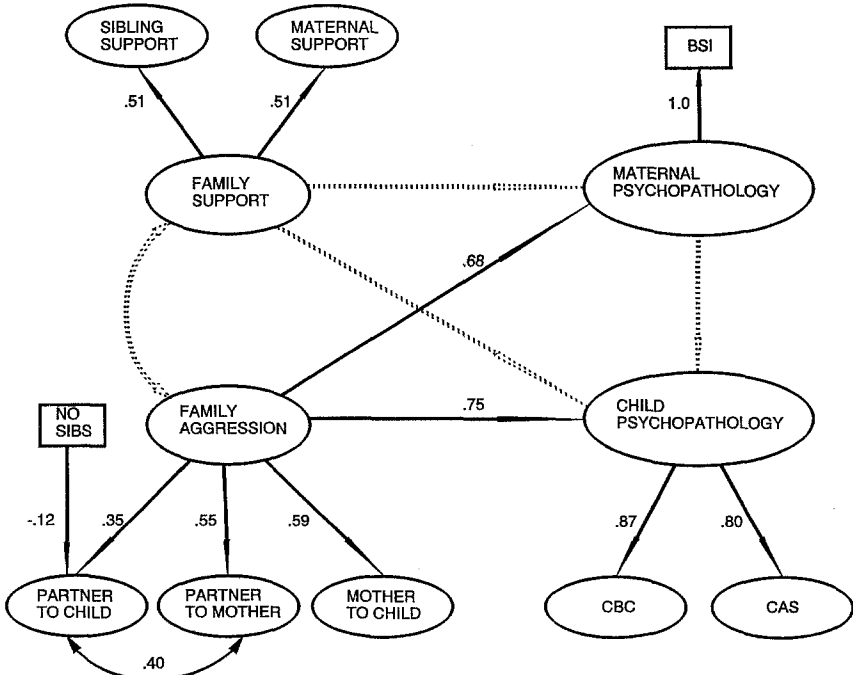


FIG. 3.—Structural equations model of the effects of family aggression on children’s psychopathology: Mother’s report. Dotted lines represent tested but nonsignificant pathways.

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factor of family violence, although all loadings are significant, partner-to-mother aggression has a high loading relative to the other forms of violence in the mother's model and a lower loading relative to child-directed aggression in the child's report. In other words, partner-to-mother aggression has less in common with child-directed aggression from the child's point of view than from the mother's.

The mother's model includes her self-report of psychopathology (as measured by the total score on the Brief Symptom Inventory). Although battered women show elevated symptoms, their distress appears causally unrelated to their children's. Family violence, therefore, accounts for most of the variance in the child's mental health, and the mother's own psychological functioning adds little further risk.

The structural models uphold few effects of the "missing data" bias, as operationalized by the relevant dummy variables ("No C-CAS" and "No SIBS"). As can be seen in Figure 3, if the target child was too young to take the C-CAS (as was the case with 33% of the total sample), then the fathers tended to be somewhat more violent toward both the mother and children. In the mother's report, if the target was an "only child" (15% of the total sample), then there appeared to be somewhat less abuse from the father. These findings should be further explored in a future study by systematically examining the effects of age and family size on parental aggression.

We performed further regressions to determine whether differences in family income, notable between the families with violence and without, accounted for any proportion of child psychopathology once violence in the family was partialled out. Our analyses failed to uncover specific effects of poverty or family economic resources on children's mental health problems after family violence was included in the regression model. However, we did find that income disparity between partners, when the women had more financial resources than the men, influenced children's mental health above and beyond the conflict accompanying it. We provide further detail of these results in another paper (McCloskey & Figueredo, 1995).

Biological Paternity and Child Abuse

We conducted separate regressions to find out whether the father's biological relatedness to the target child affected his ex-

pression of different forms of child-directed aggression, specifically physical, escalated, and sexual abuse. The father's biological paternity alone had no influence on the frequency of his aggression toward the child, according to the mother. If, however, the husband was unrelated to the child but had fathered other children in the family, the risk for physical abuse rose for the target child, $F(1, 310) = 4.61, p < .05$. The children's reports were consistent with the mothers', also showing an interaction between the father's paternity to the child and to other siblings in the home, $F(1, 310) = 4.77, p < .05$, although there were no main effects for either variable. The children were also somewhat more likely to report incest when the father was unrelated, $F(1, 310) = -1.73, p < .10$, although this finding was statistically nonsignificant. In summary, biological relatedness generally has less of an influence on paternal behavior than one might anticipate. It should be noted that the effect sizes for those links that were statistically significant were small (less than .12).

Correlations between Mother's and Child's Reports

We computed bivariate correlations comparing reports about children's mental health from mothers and those children 8 years or older who completed the Child Assessment Schedule ($n = 244$). The overall correlation between mother and child reports on the general factor of the Child Assessment Schedule was $r = .19, p < .001$. The correlation coefficient varied for individual subscales, however, and was exceedingly low (and statistically nonsignificant) for obsessive-compulsive disorder, phobias, and overanxious disorders. Although these subscales all comprise "internalizing" disorders, with symptoms in the child that mothers might have trouble discerning, there was a significant correlation on another internalizing disorder, the depression subscale ($r = .22, p < .001$), and a statistically nonsignificant correlational trend for the most prevalent of the "externalizing" disturbances, conduct disorders ($r = .12, p < .06$). It appears, then, that although there is a general correspondence in the reports by mothers and their children about the child's configuration of symptoms, there is considerable divergence on reports of specific sets of symptoms, the lower-order factors.

We also computed bivariate correlations on the family violence factors of parent and child reports. The correlation coefficient for both respondents of father to mother aggres-

sion was .49 ($p < .0001$), for father to child, $r = .28$ ($p < .0001$), and for mother to child, $r = .31$ ($p < .0001$). The mother and child appeared to agree on reports of family aggression, although agreement was more pronounced about the father's treatment of the mother than either parent's treatment of the child. In the analyses described below, we crossed mothers' reports of violence with children's reports of mental health and vice versa to further explore the convergence and disparity in mother-child perspective.

The Impact of Different Forms of Abuse on Child Psychopathology: Crossing Mother and Child Reports

Although different subscales of child psychopathology were highly correlated, a few distinct patterns emerged. Attention deficit disorder/hyperactivity was by far the most prevalent diagnostic category for all the children according to mothers, with significant differences between sampling groups, $F(2, 362) = 4.43$, $p < .05$. Separation anxiety had a low base rate in the comparison sample (8%), but significantly more children of battered women (about 30%) met the clinical cutoff, $F(2, 362) = 15.62$, $p < .0001$. Analysis of variance revealed significant differences in the proportion of children appearing obsessive-compulsive, $F(2, 362) = 3.32$, $p < .05$, and conduct disorder, $F(2, 364) = 7.24$, $p < .001$, again with children from violent homes more at risk. There was a nonsignificant trend distinguishing groups on major depressive disorder, $F(2, 362) = 2.57$, $p < .10$.

To further examine the specific effects of forms of aggression on children's expression of psychopathology, we conducted four series of sequential canonical analyses to inspect whether different forms of abuse in the home engender different manifestations of child psychopathology as revealed by the Child Assessment Schedule, according to both respondents. Because much of the aggression appeared to be intercorrelated, we first partialled out the general conflict factor, encompassing all forms of abuse in the home, including wife abuse, in order to view the unique impact specific forms of aggression might have on specific diagnostic sequelae. We selected 10 of the CAS subscales with the most clinical interest: conduct disorder, anxiety, depression, attention deficit, major depression, separation anxiety, obsessive compulsive, phobias, dysthymia, and oppositional. After partialing out the general conflict factor including wife abuse, as well as the general factors for mother-to-child and

father-to-child aggression including verbal criticism, we entered four independent variables in the following order: mother's physical abuse of child, father's physical abuse of child, father's escalated abuse of child, and father's sexual abuse. Since the father's aggression toward family members constitutes such a large part of this narrative, we thought it was important to place the mother's abuse of the child first in the chain of independent variables, to be sure to uncover unique effects of maternal abuse should they arise. We then ordered the last three forms of paternal abuse in the order of hypothesized severity, with sexual the most severe. These analyses were all conducted crossing mother and child reports of either family aggression or child psychopathology, as well as within respondent analyses.

Table 8 shows those disorders positively associated with specific forms of abuse in the home. Because the forms of aggression were highly correlated, relatively few unique effects emerged, and those that did showed effect sizes (r) between .03 and .12, each separately contributing a minor portion of the variance. There was some degree of convergent validity as well as heterogeneity in the reports of children's mental health, and relatively little indication of a unique link between a single form of maltreatment and particular outcome. There appears to be a trend, however, for sexual abuse to result in internalizing (excluding major depression) rather than externalizing (excluding oppositional) disorders. Paternal physical abuse, especially in its escalated form, predicts major depressive disorder in children. While these regressions met the criteria for statistical significance, since the effect sizes were small, caution should be applied in interpreting these patterns.

Discussion

Our findings confirm that different forms of family violence co-occur. There are two facets to this correspondence. The first is that verbal, physical, and escalated aggression are highly correlated in general. We found a particularly strong relation between men's physical abuse of women and the more extreme forms of abuse (sexual and escalated) in the mothers' reports, reflected as well in the children's reports of their fathers' violence against their mothers (excluding interspousal sexual abuse). This finding is further illustrated by the fact that two-thirds of the battered women reported that their part-

TABLE 8

THE RELATION BETWEEN SPECIFIC FORMS OF ABUSE AND SPECIFIC MENTAL HEALTH OUTCOMES:
CROSSING MOTHER AND CHILD REPORTS

FORMS OF ABUSE	DIAGNOSTIC CATEGORIES	
	Mother's Report	Child's Report
Physical (mother to child):		
Mother's report	Phobia, obsessive-compulsive, oppositional	...
Child's report	Oppositional	Obsessive-compulsive
Physical (father to child):		
Mother's report	Major depression, obsessive-compulsive, oppositional	...
Child's report	Major depression	Conduct disorder, phobia
Escalated (father to child):		
Mother's report	Major depression	Major depression, anxiety
Child's report	Major depression	...
Sexual (father to child):		
Mother's report	Separation anxiety, obsessive-compulsive	...
Child's report	Phobia, obsessive-compulsive, oppositional	...

NOTE.—All statistical tests with $p < .05$ or less.

ners had choked them at least once, and nearly half had been threatened with a weapon. Children of battered women are witnesses to this escalated violence: nearly half reported that their fathers had choked their mothers. This result demonstrates that it is common for fathers in our sample who have used lesser forms of aggression such as hitting and pushing to threaten or attempt to kill the mother on at least one occasion. Children of battered women, therefore, are exposed to levels of violence as extreme as those described in Pynoos's studies of traumatized children (Pynoos & Eth, 1984; Pynoos et al., 1987), living under a shadow of lethal threat.

It is also true that different forms of aggression against children covary. The exception to this pattern is the case of sexual abuse of the child, with a low factor loading on paternal abuse. It appears that the father's sexual abuse of the child often occurs in the absence of physical abuse, and that physical abuse is rarely accompanied by sexual abuse. Although child-directed physical abuse appears unrelated to sexual abuse, wife abuse appears to be linked to the sexual abuse of the child. For instance, there was a marked difference in the prevalence of sexual abuse between samples, where virtually all reports of incest came from the at-risk rather than comparison sample. This finding

suggests that violence against the mother is a serious risk factor for incest. Williams-Meyer and Finkelhor (1992), in their interview study of 100 incestuous fathers, found that 9% of the men reported that their sole motivation for molesting their daughters was to retaliate against their wives. Many of the men reported little or no sexual interest or arousal in response to their daughters or other children. In those couples where there is wife abuse, sexual abuse of daughters might be motivated by the men's intentions to harm or coerce their wives.

We found that in addition to converging forms of aggression, abuse occurs across relationships. Fathers who batter their wives are more likely to hurt their children. This finding is hardly surprising, although we did not find that being biologically related to the child predicted their abusive behavior, a finding clearly at odds with data available on stepfathers and child homicides (Daly & Wilson, 1994). In our own study, we were surprised to learn that whether the father was biologically related was also apparently unrelated to his sexual abuse of children in the home, although the children's reports indicate that there might be more of a link than the mothers' reports. Our failure to uncover paternity as a risk factor for child abuse is consistent with the possibility that these fathers hurt the children in order to

spite the mother. If children are merely intermediary objects in the man's plan to coerce the mother, his own relationship to them will be secondary to his use of them to retaliate, as Williams-Meyer and Finkelhor's (1992) results suggest. Figueredo and McCloskey's (1993) evolutionary analysis of men's motives for coercing women and children develops the notion that men use a range of aggressive tactics, including threatening the children, presumably to retain women as sexual partners.

Most of the children across samples had been physically punished by a parent, in the form of being spanked, slapped, or "hit with an object." However, more children of battered women experienced it more often from both parents. Children of battered women, then, are at heightened risk for maltreatment from both parents, although most often the father. These findings are consistent with those reported by Straus and Smith (1990), indicating that child abuse is 18 times more likely to occur in homes where there is violence between the parents. Jouriles et al. (1989) also found that a high proportion of children of battered women who were in shelters were victims of paternal abuse. Levinson's (1989) review of cross-cultural findings based on ethnographers' accounts taken from the Human Relations Area Files (HRAF) also shows that while wife beating is the most prevalent form of abuse across cultures, it often co-occurs with physical child abuse.

The mothers' and children's reports about violence and symptoms were significantly correlated, indicating that there is a shared perception of family events. This finding also indicates that the mothers, although having troubles of their own, are able to accurately perceive at least some of the symptoms in their children, consistent with Richters and Pellegrini's (1989) study challenging the depression-distortion hypothesis. Although women's symptoms of psychopathology increased as a function of domestic violence, mothers' mental health did not mediate the effects of violence on their children.

We found that family violence accounts for about 12% of the variance in child psychopathology in the child's report, and 56% of the variance in the mother's report. The typically small effect sizes for any given form of abuse mapping onto various forms of mental health problems confirms the need to look at the general rather than specific

dimensions of family conflict or psychopathology. Studies that focus on only one dimension of abuse and only one or two psychological outcomes might yield statistically significant findings in contrast to comparison children but will also probably yield small effect sizes. The fact that children from violent homes simultaneously show a wide range of both internalizing and externalizing symptoms indicates that perhaps the symptom range and overlap are of interest. It is commonly reported that maltreated children have heterogeneous outcomes and display more variance on almost any given outcome measure than control children (Cicchetti et al., 1987). It is perhaps this heterogeneity that signifies trauma, rather than a specific psychological outcome. It is also possible that, as children reach adolescence, their symptom profiles become more differentiated.

Total family violence, then, has a direct influence on children's mental health, and the effect size is especially large from the mother's perspective. There are a number of possible reasons that violence only accounted for a modest proportion of the variance in psychopathology according to the child's report. One possibility is that, although the general portrait of family violence and the child's mental health is similar across the mother's and child's reports, the mothers in violent homes might be more sensitive to the chance that their children are at psychological risk and so are especially attentive to symptoms, more than the children themselves. It also seems likely that the mother is a more reliable source of information about interspousal aggression and, probably, about father-to-child aggression as well. Her rendition of the climate of family aggression might be more veridical and, therefore, more predictive of the child's symptoms. Finally, there might be other stressors outside of the scope of this article exerting influence on children's mental health that are either external to the family (i.e., stressful events due to poverty) or within the family that might not covary with violence, but contribute to children's mental health problems, such as parental psychopathology and associated genetic and environmental risks.

From the child's perspective, the factors adding most weight to the higher general factor of family violence involved *experiencing* violence from either of the parents, more than *witnessing* interparental aggression. It makes sense that being the repeated target

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of attacks would be more salient than even the mother's victimization. However, there is another feature of psychological stress unaccounted for in our study, which is that it might be more frightening for the children to experience direct paternal threats after they have witnessed these men's attacks against their mothers. In that case, most would have seen the potential lethality of their fathers' aggression, making even a verbal threat or spanking from him more terrifying. There could be an interaction between witnessing and experiencing abuse from the same perpetrator that psychically taxes the child more than either experience alone.

A number of predictors were tested by the structural equations model. We explored whether support or affiliation within the family, between the child and either the parents or another sibling, buffered the target child from harmful psychological consequences of family violence. We found that, although violent families were indeed less supportive, when support did occur it failed to buffer the children from adverse effects at least in the short term. Although children's perception of parental warmth and nurturance is negatively correlated with the presence of violence, it apparently is not causally related to mental health outcomes. At first consideration, this finding appears to contradict what Garmezy (1983), Rutter (1979), and Sandler (1980) among others might have predicted. They report that children under the stress associated with poverty appear to fare better if they have a close relationship with a parent. However, these studies all pertain to stress *outside* of the family. When the source of stress resides within the family itself, and especially when it is so profoundly dysfunctional as to lead to serious displays of aggression and sexual abuse, those more affirming features of family relationships are unlikely to help. There is also the possibility, however, that a more sensitive measure of relationship dynamics would yield different findings. The "positive" aspects of mother-child and sibling-child relationships we assessed focused on warmth, kindness, and expressed affection experienced by the target child. It is also possible that a more complex, but supportive, dimension of relationships could help children cope with family-based stress. For example, a mother's consistent ability to scaffold the acquisition of values and socially appropriate behavior for the child, or a sibling's fierce loyalty or protectiveness during times of stress, all might serve to buffer children, especially

from character disorders or delinquency, if not from more immediate responses of anxiety and depression. This study is not longitudinal, and therefore we simply cannot discern whether warmth and affection expressed to the target child during childhood, while having few mitigating effects on concurrent assessments of the child's symptoms, might have a long-term effect on the child's expression of psychopathology.

We have at least tentatively ruled out some explanations for why spousal violence affects children. Although children perceive their mothers as expressing less warmth, this feature alone fails to predict the child's expressed symptomatology. It is also true that battered women have elevated psychological symptoms themselves, but again, their self-reports of psychopathology are unrelated to children's mental health beyond the deleterious effects of family violence. It should be noted, however, that because the study relies on self-reports it is certainly possible, indeed likely, that a response bias exists within the reports of violence and child psychopathology. Mothers, for instance, might overreport both husbands' abuse and the children's mental health problems. They might, on the other hand, underreport their own mental health symptoms as a function of domestic violence. Children, conversely, might underreport in both domains because of problems understanding the questions or, more likely, because of the habits of silence and prevarication in their families. Although the extent of this bias within either mother or child reports is indeterminate, it seems unlikely that our overall pattern of results would change if bias somehow could be eliminated, since our effect sizes are so robust.

The question remains of how exactly domestic violence leads to psychopathology in children. Witnessing threats to one's mother, and receiving threats to one's own physical safety, extracts a serious toll on emotional stability, as studies of posttraumatic stress and children traumatized through a wide range of hazards have shown. It is also likely that the abusive acts within these families are the visible crest of a pervasive wave of terror. The dread of violence might disrupt psychosocial development more than the event itself; the ways children cope with this persistent fear might lead to locked-in patterns of coping in their adult lives. Artists have been able to evoke these sentiments in film and writing, such as Ingmar Bergman in *Fanny and Alexander*, Theodore Roethke

(1942) in his poem, "My Papa's Waltz," and Ruthie Bolton (1994) in her recent memoir, *Gal: A True Life*. How to assess this domestic climate of tyranny that so many of these children live through should be on the future agendas of those researching family violence.

In summary, when there is extreme marital discord, aggression by either parent toward the child often follows, and elevated, undifferentiated symptoms of psychopathology are likely to result. Our study suggests, then, that wife abuse sets the stage for paternal child abuse, with children caught in the crossfire of marital combat. They are used for purposes of retaliation and control in adult relationships. The psychological problems which ensue are debilitating and could be long-lasting. We believe that, without ending violence between sexual partners, children will continue to be victims of systemic family aggression.

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