

The posttraumatic stress symptoms of 64 children ages 7 to 12 were assessed by their mothers, who had experienced emotional and physical abuse during the past year. A measure of child symptoms based on DSM-IV criteria was used. Of the children exposed to violence, 13% qualified for a complete posttraumatic stress disorder (PTSD) diagnosis. However, 52% suffered from intrusive and unwanted remembering of the traumatic event(s), 19% displayed traumatic avoidance, and 42% experienced traumatic arousal symptoms. Children with PTSD symptoms had significantly more internalizing behavioral problems, as expected; they also had more externalizing problems than did children without trauma symptoms.

Traumatic Stress Symptoms in Children of Battered Women

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Studies of the impact of domestic violence on children reveal that many children who witness violence to their mothers have more serious behavioral problems than comparable but nontraumatized children (Jaffe, Wolfe, & Wilson, 1990; McCloskey, Figueredo, & Koss, 1995; Rossman, Bingham, & Emde, 1996; Sternberg et al., 1993). However, to date, there has been little systematic investigation of the trauma symptoms specific to school-age children living in such family circumstances. Studies of children who have experienced and witnessed other traumatic events (e.g., inner-city violence, sexual abuse, and even child physical abuse) reveal that some children exhibit symptoms equivalent to the posttraumatic stress disorder (PTSD) found in adults (Briere, 1992; Eth & Pynoos, 1985; Garbarino, Kostelny, & Dubrow, 1991; Richters & Martinez, 1993; Wolfe, Gentile, & Wolfe, 1989).

Assessing Trauma in Children

Trauma theorists assert that a psychological trauma occurs when an event elicits fear, helplessness, and overstimulation and when that event is identi-

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fied by the observer as traumatic (Pynoos, 1993; Pynoos & Eth, 1985; Terr, 1990). Thus, not all children who observe the same event will have similar reactions. Yet, some children who witness the abuse of their mothers or take seriously a threat to kill the mother may respond with symptoms associated with feeling overwhelmed by these traumatic events.

There are no PTSD criteria specific to children in the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (American Psychiatric Association, 1994; Saigh, 1989). Some researchers have tried to measure posttraumatic symptoms in children by extrapolating ratings from existing measures of child behavior. For example, Wolfe et al. (1989) studied the traumatic impact of sexual abuse on children using Achenbach and Edlebrock's (1993) Child Behavior Checklist (CBCL). Other researchers have used the CBCL in combination with additional measures of specific stress symptoms, for example, dissociation (Rossman et al., 1996). However, the CBCL relies on maternal ratings of the frequency of the child's general behaviors—behaviors that are not directly tied to the particular trauma under study. One of the central requirements of the *DSM-IV* PTSD diagnosis is that the behaviors or symptoms have occurred as a direct result of a particular traumatic episode or experience.

Some researchers have developed clinical interviews to elicit the types and extent of symptoms in children exposed to different traumas (Arroyo & Eth, 1995). Others have created measures that focus on one aspect of trauma (e.g., Putnam, Helmers, & Trickett's [1993] Child Dissociation Scale) or on multiple aspects of trauma (e.g., Briere's [1989] Trauma Symptom Checklist for Children). Once again, these measures ask whether particular behaviors or symptoms are present in the child. They do not indicate that the behaviors must be specific to a particular trauma experience. Instead, the link to the trauma is inferred by what is known about the population under study. Even when differences between groups of children who have and have not been traumatized are tested, there is no certainty that the symptoms are the result of the trauma under study rather than resulting from one or more other causes. These measures also rely on the general experience of the child and on the child's willingness to disclose information. Thus, measures of the child's behaviors and trauma symptoms need to frame questions in a way that make clear the connection between the trauma and its behavioral outcome.

Studies of Unitary and Chronic Trauma in Children

Trauma symptoms in children have been studied in relation to one-time events, such as being in a fire or being kidnapped (Terr, 1990), seeing someone shot (Garbarino et al., 1991), experiencing an earthquake (Brad-

burn, 1991) or other natural disaster (Lonigan, Shannon, Finch, Daugherty, & Taylor, 1991), or being attacked by a dog (Rossman et al., 1996). Evidence of long-lasting trauma has been found for some survivors of each of these single event stressors (McNally, 1993).

Studies of the ongoing traumatization of children include incest (deYoung & Lowry, 1992; Janoff-Bulman, 1992), sexual abuse (Finkelhor, 1984), sibling abuse (Graham-Bermann & Cutler, 1994), child physical abuse (Anthony, 1986; Goodwin, 1988), and war (Bat-Zion & Levy-Shiff, 1993; Kinzie, Sack, Angell, Clarke, & Ben, 1989; Kinzie, Sack, Angell, Manson, & Rath, 1986). Evidence of posttraumatic symptoms has been found for some children in each of these areas as well. For example, children with posttraumatic stress symptomatology may show an exaggerated startle response (Ornitz & Pynoos, 1989), dissociation (Putnam, 1985; Putnam et al., 1993), traumatic memories and intrusive play (Davies, 1992; Sugar, 1992; Terr, 1981, 1990), and a general vulnerability to stress (Goodwin, 1988; Green, 1983).

Unique Epidemiology of Woman Abuse Trauma for Children

Saunders (1994) studied the trauma profiles of women battered by their partners and found that many suffer both recent and recurrent trauma symptoms. Herman (1992b) notes that the responses to extreme stress are best viewed on a continuum rather than as one single disorder and may range from brief reactions that dissipate over time, "to classic or simple posttraumatic stress disorder, to the complex syndrome of prolonged, repeated trauma" (p. 119).

The complex traumatic stress label is appropriate for describing the effects of spouse abuse on children because children who witness such violence are, most often, not reacting to a unitary event. Children also may be subject to revictimization at any time, as when they view additional assaults or are reminded of them. Over time, children learn that they are powerless to do anything to stop the violence. Furthermore, we know that woman abuse often escalates and may be worse the next time around (Herman, 1992b).

The trauma of physical abuse to women is almost always accompanied by the psychological maltreatment of the woman (Hamby, Poindexter, & Gray-Little, 1996; Marshall, 1992; Tolman, 1989). This can include coercion, physical threats, sexual intimidation, insults, and reminders of the abuse that has occurred in the past. Emotional abuse of the mother adds to the child's burden by making it difficult to recover or heal from prior violence events. For example, a persistent atmosphere of intimidation and threat can repeatedly stimulate posttraumatic play in the child (Davies, 1992; Terr, 1990).

Children in families of domestic violence may be further damaged and harmed by the lack of available support and an abundance of negative role models—that is, the available models are for the very relationships that children may wish to reject but are often doomed to repeat (Graham-Bermann, 1996). Perhaps the concept of traumatic bonding best describes the double bind in which these children find themselves (deYoung & Lowry, 1992). Moreover, we know from clinical reports that they often do not have even one parent who is able to respond reasonably and to inoculate them against the further negative effects of traumatic abuse (Herman, 1981).

Thus, the epidemiology of the trauma experienced by children in woman-abusing families is not directly comparable to the trauma induced by single events outside of the family. It may be closer to other forms of family violence (e.g., child physical abuse, incest, or even the trauma experienced by the mother). Posttraumatic stress symptoms of children from woman-abusive families may be recurrent and ongoing, as the violence and abuse are best understood as continuous rather than discreet or unitary traumatizing events. Furthermore, the traumas associated with domestic violence are unique in that both the mother and the father are involved in the trauma to the child, albeit in different ways and with differing roles (Dutton & Painter, 1993). Hence, we need to describe and evaluate the special traumatic reactions of children to the specific circumstances of woman abuse.

A study by Lehmann (1996) is instructive in this regard. The sample consisted of 84 children living in a battered women's shelter and relied on the self-report of trauma symptoms experienced by the children over the past month. The measure of trauma symptoms was a scale developed for use with sexually abused children and adapted for use with this population of children recently exposed to domestic violence. The measure was scored on a 3-point scale of 0 = *not true*, 1 = *somewhat true*, and 2 = *very true*. A symptom was counted as present if the child indicated that the item was either somewhat true or very true of him or her. The sample consisted of Caucasian Canadian children ages 9 to 15. No gender differences were found. Using this self-report measure, 47 of the 84 children (or 56%) met diagnostic criteria for PTSD.

However, several limitations should be noted. First, the sample consists of children living in domestic violence shelters (e.g., children who have recently experienced significant trauma and the upheaval associated with leaving home and adjusting to a new environment). Yet, one of the essential diagnostic criteria for evaluating PTSD in children is the presence of symptoms that last for more than a month after exposure to the trauma. Thus, the recency of trauma may preclude the diagnosis because sheltered children may or may not have persistent symptoms. A second limitation is the use of self-report

data that ask the child to evaluate gradients of the severity of symptoms rather than the presence or absence of symptoms as stipulated in the *DSM-IV*. Thus, for example, it is unclear whether a child who endorses that having nightmares is "somewhat true" of him or her has this as a persistent symptom.

Taking the critique of studies in this area into account, the following study was designed to identify the range of trauma symptoms found in children who have witnessed the physical and emotional maltreatment of their mother by their father or mother's partner during the past year. Psychological abuse includes the frequency of acts of coercion and threats, and physical abuse includes the frequency of both mild and severe physical violence. Using the exact criterion of the *DSM-IV* for diagnosing PTSD in adults and recommended for diagnosing PTSD in children, 17 posttraumatic symptoms in the child that are directly related to the violence were measured. Finally, posttraumatic stress symptoms were compared to other indices of the individual child's adjustment.

METHOD

Subjects

The 64 children in this study ranged in age from 7 to 12 with a mean age of 9.50 ($SD = 1.92$). There were 33 boys and 31 girls. The mean age of the mothers was 34.37 ($SD = 5.84$), and most of the mothers had completed high school (80%), with more than half having some college education or technical training (59%). The average monthly family income was low ($M = \$1,083.52$, $SD = \$870$). Thirty-one mothers were currently employed, and 33 were not. Finally, the sample was ethnically diverse, with 45% of the mothers in ethnic minority groups (35 Caucasian, 21 African American, 8 other).

Measures

Physical and emotional abuse to the mother. Two measures were combined to assess the frequency of emotional and physical abuse toward the child's mother during the past year. The Conflict Tactics Scale (CTS) (Straus, 1979) has 15 items that measure three factorially separate variables: (a) reasoning, (b) verbal aggression, and (c) violence or physical aggression among dyads in the family. Only the verbal and physical aggression subscales were used in this study. The first national survey, which endeavored to document the prevalence of domestic violence in the United States, employed

the CTS (Straus & Gelles, 1990). Subsequently, Marshall (1992) developed the Violence Against Women Scale, which measures the frequency of psychological abuse of the woman by her partner. Internal consistency (α) of the measure was reported at .96 (Marshall, 1992).

Taken together, the two measures yielded assessments of the frequency of control tactics, physical threats, mild violence, and severe violence to the woman. In this study, the internal consistency for each subscale was .79 (α) for the frequency of control tactics, .85 for physical threats, .85 for mild violence, and .85 for severe violence. Mothers also were asked to indicate whether the child had witnessed any event that she endorsed in the 53-item questionnaire.

Child traumatic stress symptoms. Traumatic stress symptoms in the child were measured with the diagnostic criteria for PTSD in adults (Saunders, 1994) and adapted for use with children for this study. As stated in the *DSM-IV*, after witnessing a trauma, the first reaction to the event(s) must include intense fear, horror, or helplessness and for children may include disorganized or agitated behavior. Other criteria are the persistent reexperience of the traumatic event, the avoidance of stimuli associated with the event and/or psychic numbing, and an increase in arousal symptoms. To qualify for a PTSD diagnosis, symptoms must have been present for more than a month, and the disturbance must have caused distress in other areas of the child's life. The 17 questions based on these criteria are listed in Table 1. Each mother was asked to report whether any of these reactions were seen in her child as a direct response to the violence and abuse that the child had observed between the mother and her partner. For this sample, the internal consistency (α) of the measure was .80.

Child adjustment. The child's behavioral adjustment was assessed by the mother and the child's teacher with the CBCL (Achenbach & Edlebrock, 1993) and by the child with the Perceived Competence Scales for Children (Harter, 1982, 1985). The CBCL asks mothers to report on the frequency of the child's behavior using a 3-point scale, with 0 = *not true*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*. The CBCL yields two broad scales that describe the child's externalizing behaviors (with subscales of aggression and delinquency) and the child's internalizing behaviors (with subscales of anxiety/depression, withdrawal, somatic complaints). The CBCL has demonstrated reliability and validity in research with both clinical and nonclinical child populations (Achenbach & Edlebrock, 1993; McCloskey et al., 1995; Sternberg et al., 1993).

TABLE 1: Number and Percentage of Child Witnesses to Domestic Violence Who Exhibit Trauma Stress Symptoms

<i>Symptom</i>	<i>Total (N = 64)</i>	<i>%</i>
1. Intrusive memories of violence event(s)	23	36
2. Dreams or nightmares specific to violence event(s)	6	9
3. Repeat acting out, perseverative play of event(s)	9	14
4. Reaction to mention of or remembering violence event(s)	22	34
5. Avoiding thoughts or feelings related to violence event(s)	19	30
6. Avoiding activities or play related to violence event(s)	17	27
7. Forgetting or repressing parts of violence event(s)	8	13
8. Reduced interest in activities since violence event(s)	4	6
9. Isolation or detachment from others since violence event(s)	11	17
10. Flat affect or reduced feelings since violence event(s)	11	17
11. Not having long-range future plans since violence event(s)	9	14
12. Sleep disturbance, trouble either falling asleep or staying asleep since violence event(s)	8	13
13. Irritable, more angry since violence event(s)	31	48
14. Trouble concentrating or paying attention either at home or in school since violence event(s)	27	42
15. More alert, vigilant, or on guard since violence event(s)	16	25
16. Startles or jumps more easily since violence event(s)	16	25
17. Physical reaction (e.g., shaking or sweating) when reminded of violence event(s)	7	11

Internal reliability (α) for the two CBCL scales in this study was high—.90 for the internalizing scale and .97 for the externalizing scale. Interrater reliability was established by correlating mothers' ratings with those of the child's teacher, who completed the Teacher Report Form of the CBCL (Achenbach & Edlebrock, 1993). Teachers' and mothers' reports were significantly and positively correlated for the CBCL internalizing score ($r = .36$, $p < .003$) and the CBCL externalizing score ($r = .38$, $p < .002$), indicating agreement between two separate sources of evaluation of behavioral adjustment. Only mothers' assessments were used in the analyses.

Social competence and global self-worth were assessed by the child with the Perceived Competence Scales for Children (Harter, 1982, 1985). The child was asked to decide whether a given statement is like or unlike the child, then sort of true or really true of the child. Reported means are based on the 4-point scale derived for each behavioral statement. For this study, the reliabilities (α) were .68 for the global self-worth scale and .63 for the social competence scale.

TABLE 2: Frequency of Violence Experienced by the Mother and Mean Adjustment Scores of Boys, Girls, and Their Differences (*N* = 64)

	<i>Boys (n = 33)</i>	<i>Girls (n = 31)</i>	<i>t Value</i>
Mothers' violence experience			
Physical threat	29.86 (53.10)	14.18 (18.39)	1.56
Coercion	61.62 (77.92)	40.10 (39.16)	1.38
Mild violence	22.65 (47.56)	5.07 (8.93)	2.08*
Severe violence	14.77 (40.61)	3.24 (9.34)	1.59
Child adjustment			
Internalizing behavior	14.42 (10.08)	11.94 (6.17)	1.20
Externalizing behavior	17.09 (10.84)	15.32 (9.35)	.70
Self-worth	3.47 (.70)	3.12 (.64)	2.13*
Social competence	3.05 (.67)	2.81 (.72)	1.34

NOTE: Standard deviations in parentheses.

* $p < .05$.

Procedure

Families were recruited through domestic violence shelters, food stamp offices, posters in neighborhood buildings and stores, and from community intervention programs for battered women in two Michigan cities. Ten children and their mothers were interviewed at shelters for battered women, and 10 other women at the same shelters were asked to participate but refused. Eight children and their mothers were recruited from community support groups for battered women. Thirty-eight children and mothers responded to the social services flyers, and another 8 children and mothers responded to the general flyers and newspapers ads. Mothers and children were interviewed separately by female research assistants who received training in clinical interviewing techniques. After receiving permission, the teacher was contacted by telephone and mailed the CBCL questionnaire. Mothers were paid \$30, teachers were paid \$10, and each child received a gift worth approximately \$3.

RESULTS

The means and standard deviations for the frequency of emotional and physical abuse events and the mean child adjustment scores are shown in Table 2. The number of emotional and physical violence events varied greatly for the children in this study. They were exposed to an average of approxi-

mately 22 physical threats and 50 coercion events during the past year. Boys were exposed to significantly more mild violence than were girls. Incidences of severe violence were relatively rare, yet varied within the sample. With the exception of self-worth, the child behavioral adjustment scores did not differ by sex.

Posttraumatic stress symptoms in the child. The first criterion of posttraumatic stress is whether the child has been exposed to and intensely upset by the physical violence event(s) toward the mother. Each of the mothers felt that her child was extremely upset by the mild or severe violence between the mother and her partner that had occurred in the home during the prior year. Of the 64 children in the sample, 70% were eyewitnesses to the domestic violence events; the rest had overheard the violence when it happened.

Forty-eight percent of the mothers rated their children as showing the trauma symptom of being irritable and 42% as having trouble concentrating due to the violence that occurred (see Table 1). Many mothers said that their children repeatedly remembered the violence events. Approximately one third were reported to have violence-related difficulties either in the areas of experiencing intrusive memories and conversely in making efforts to avoid thinking about the violence, and 25% were reported to be hypervigilant and to startle easily. Only a few of the children had dreams and nightmares, reduced interest in things, or a physical traumatic reaction specific to the violence. No significant sex differences were found in PTSD symptoms. Furthermore, post hoc analyses showed no significant difference in the frequency of PTSD symptoms between children who had and had not been physically abused.

To delineate the number of children who qualified for a diagnosis of PTSD, the 17 symptoms were divided into three groups, according to criteria listed in the diagnostic manual. The first set of criteria includes symptoms of intrusive reexperiencing of the trauma—for example, intrusive memory, dreams or nightmares, unwanted remembering, and a strong physical reaction in relation to people or situations reminiscent of the violence event(s). To satisfy this set of criteria, the subject must have experienced one or more of these symptoms. Thirty-three children, or 52% of the sample, met the requirements for intrusive reexperiencing.

The second set of criteria is centered on persistently avoiding stimuli associated with the trauma. Three or more of the following symptoms are needed to satisfy the second set of criteria—avoidance or repression of thoughts related to the violence, avoidance of activities reminiscent of the

TABLE 3: Differences in the Frequency of Four Types of Violence to the Mother for Those With and Without Intrusive Reexperiencing Stress Symptoms (N = 64)

	<i>With Intrusion</i>		<i>Without Intrusion</i>	
	M	SD	M	SD
Frequency of violence				
Physical threat	34.33	51.83	8.74	13.38**
Coercion	71.11	75.44	30.00	35.84**
Mild violence	23.48	47.56	4.18	6.80*
Severe violence	16.63	40.94	1.27	1.88*

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

trauma, reduced interest in activities enjoyed before the trauma, isolation or withdrawal, flat or little affect, and little or no interest in future activities or plans. Twelve children, or 19% of the sample, had three or more persistent avoidance symptoms.

The third category of stress concerns behaviors associated with traumatic arousal that are new behaviors related to the violence event(s), such as sleep problems, irritability, difficulty in concentration, hypervigilance, and an exaggerated startle response. Two or more symptoms are needed to satisfy this criterion. Twenty-seven children (42%) experienced increased traumatic arousal symptoms.

Taken together, then, only eight (13%) of the children exposed to the violence to their mother in the past year qualified for a complete PTSD diagnosis according to *DSM-IV* criteria. However, 52% suffered from intrusive reexperiencing, 19% displayed traumatic avoidance, and 42% had traumatic arousal symptoms. No sex differences were found in the frequency of PTSD criteria.

PTSD symptoms and frequency of abuse to mother. Differences in the frequency of four types of violence against the mother were compared for children with and without the three PTSD criteria and full diagnosis to describe the traumatic stress responses of the children relative to the kind and amount of violence in the home. Significant differences in the mean number of violence events were found for children with intrusion symptoms versus those without intrusion symptoms (see Table 3). Violence frequency did not differ for arousal and avoidance symptoms or for the those with and without the full PTSD diagnosis. There were no significant differences in the mean number of posttraumatic symptoms between those who witnessed versus those who did not witness the abuse of the mother.

TABLE 4: Variance in Mean Children's CBCL Scores for Those With and Without Three PTSD Criteria and Full Diagnosis (N = 64)

Symptom	CBCL Internalizing				CBCL Externalizing			
	With		Without		With		Without	
	M	SD	M	SD	M	SD	M	SD
Intrusion	15.28	9.07	10.04	7.21**	19.28	10.52	12.68	9.53**
Avoidance	20.29	11.95	11.19	6.51*	24.00	14.34	14.62	8.51*
Arousal	17.37	9.27	8.41	4.80***	21.74	11.66	11.06	5.39***
PTSD diagnosis	22.00	11.08	11.71	7.46***	26.44	12.77	15.05	9.44**

NOTE: CBCL = Child Behavior Checklist; PTSD = posttraumatic stress disorder.

* $p < .05$. ** $p < .01$. *** $p < .001$.

PTSD symptoms and child adjustment. Table 4 shows the variance in mean CBCL scores for children with and without the three PTSD criteria and diagnosis. Correction for the number of tests (eight) sets the significance criterion at approximately .01. As expected, there was significant variation in children's CBCL internalizing scores for those with the symptoms of intrusion, arousal, and PTSD diagnosis. However, the CBCL externalizing scores also varied significantly for children with these symptoms and diagnosis. In each case, children who experienced symptoms had higher CBCL scores than children who did not evidence symptoms. Children's mean global and social self-competence scores did not vary by PTSD category and diagnosis.

Child adjustment and posttraumatic stress symptoms. Post hoc analyses of the associations between PTSD symptoms and both attention and thought problems, as measured by the CBCL, were performed to provide a partial validation of the PTSD construct. Recall that half of the mothers reported that their children were irritable and had trouble concentrating and paying attention. It should be noted here that the CBCL Thought Problems and Attention Problems Scales are distinct from the subscales that comprise the internalizing and externalizing behavioral categories (Achenbach & Edlebrock, 1993).

There was a significant difference in the mean CBCL Attention Problems Scale score of children with arousal symptoms ($M = 7.47$, $SD = 4.43$) versus those without arousal symptoms ($M = 3.91$, $SD = 2.99$, $t(62) = 3.84$, $p < .001$). A difference in mean CBCL Thought Problems Scale scores also was found for children with arousal symptoms ($M = 2.40$, $SD = 2.20$) versus those without symptoms ($M = .67$, $SD = .82$, $t(62) = 4.26$, $p < .001$). No significant differences in these two CBCL scales were found for intrusion, avoidance, or the complete PTSD diagnosis.

DISCUSSION

Results of this study indicate that a significant number of children exposed to the abuse of their mothers suffer symptoms associated with posttraumatic stress. When there was emotional and physical abuse of the mother in the home, most of the children were eyewitnesses to these events. Although only 13% of the children exposed to the violence qualified for a full diagnosis of PTSD, many had traumatic distress symptoms. More than half suffered from intrusive and unwanted remembering of the trauma, one fifth displayed traumatic avoidance, and 42% experienced traumatic arousal symptoms.

These findings reflect studies of traumatic stress reactions in children who witnessed unitary traumatizing events—for example, Garbarino et al.'s (1991) work on inner-city violence and Rossman et al.'s (1996) study of children's reactions to dog bites. Similarly, these results support research showing traumatic stress symptoms in children exposed to ongoing abuse—for example, trauma in sexually abused children (Finkelhor, 1984; Wolfe et al., 1989) and physically abused children (Goodwin, 1988; Green, 1983). Furthermore, the intrusive symptoms identified by mothers in this study match descriptions of the types of unwanted traumatic memories and compulsive traumatic play identified by Terr and others (Davies, 1992; Sugar, 1992; Terr, 1981, 1990).

The arousal symptoms include the exaggerated startle response discussed by Ornitz and Pynoos (1989). Interestingly, arousal symptoms were associated with both attentional and thought difficulties in the child. Due to the associational nature of the results, it is not clear whether the child's being overly alert and on edge, constantly aware and wary, and having sleep difficulties contributed to the tension in the family in any way. Nonetheless, a coping style that may serve the child well in a dangerous home environment can have devastating consequences in other settings. Thus, the issue of domestic violence may prove salient to a number of children who exhibit thought and attentional problems in school.

As expected, children who experienced posttraumatic stress symptoms had higher internalizing CBCL scores than children without symptoms. However, children with intrusion and arousal symptoms also scored significantly higher on externalizing behavioral problems. These results indicate that children traumatized by domestic violence are agitated and aggressive, in addition to being withdrawn and depressed—symptoms commonly associated with experiencing trauma. For example, the intrusive reexperiencing of memories of violence may serve to upset the child, which in turn may arouse the child's fight or flight system of defense and may lead to aggression either against the self or against others. These findings suggest that trauma

sequelae surely must be present in the children's interpersonal world and cognitive development as well.

Sampling issues and rates of PTSD. This study showed lower overall rates of PTSD than those found by Lehmann (1996) and Rossman et al. (1996). Yet, these studies differed in several important ways. Most essential to note is that this study employed a sample of women and children, most of whom were residing in the community—not a study of children residing in a shelter for battered women. We purposefully chose not to study children in shelters precisely because many are still in the midst of the trauma and not recovering from or adjusting to the trauma. In the case of children in the shelter, they may also be reacting to the stress of being relocated (e.g., leaving home, moving into a new environment). However, all that said, the mothers of children in shelters may have endured more serious physical violence than that of battered women in the community.

The criteria for the presence of a symptom were broader and more flexible in the Lehmann (1996) study than in this study. A child's report that a symptom was "somewhat true or very true" differs in specificity and judgment from either the presence or absence of the symptom according to the child's mother. For example, one either does or does not have nightmares; one does or does not avoid places that remind that person of the event. In this study, we specifically selected the most stringent criteria for inclusion of the presence of a symptom as stipulated in the *DSM-IV* manual, and this is reflected in the lower rates reported. The question remains as to what is lost or gained in taking a more flexible view of trauma symptoms and whether the *DSM* system adequately captures the trauma experiences of these children.

Diagnostic differences between adjustment reaction with features of anxiety and PTSD. Given that the study is of posttraumatic stress symptoms and PTSD disorder, it seemed critical to assess, as much as possible, children who had been exposed to violence in the past but who were not grappling with trauma in the immediate past or present. This distinction is essential because PTSD, as defined in the *DSM-IV*, is reflected in the presence of symptoms that last for more than a month after the trauma. Hence, studies that assess children in shelters may have confounded the child's adjustment reaction to current or ongoing trauma with PTSD symptoms that last 1 month beyond the stressor. By studying children in the community, those with acute PTSD symptoms (where the duration of symptoms is less than 3 months but more than 1 month) and those with chronic PTSD symptoms (those lasting 3 months or more), as well as those with delayed onset of symptoms (onset at

least 6 months after the stressor), can be included in the study. Future studies could use these gradations of PTSD symptoms in measures.

Limitations. This study relies on the maternal report of the trauma symptoms. The issue of whether mothers are reliable reporters is a source of debate in this area of research. However, Nader and Pynoos (1992) note that mothers tend to favor reporting externalizing symptoms, whereas the children themselves are more likely to report internalizing symptoms. Thus, these assessments of PTSD are most likely underreported because they rely more on the characterization of internal states and less on the child's outward problematic behavior. Many of the mothers may not have noticed the child's symptoms of traumatic distress and/or may not have associated the child's behavior with the physical and emotional maltreatment that they have witnessed. Many battered women deny or minimize the battering they have experienced and may similarly minimize the impact of such events on the child (Cascardi & O'Leary, 1992; Herman, 1992a). However, the significant correlation found between mothers' and teachers' reports of the child's behavioral symptoms suggests, at least for this study, that the mother is a reliable reporter of events.

Another limitation of the study is its reliance on adult-level symptoms as the index of trauma. We know from clinical experience that terror and helplessness in the child can be expressed in many ways, beyond adultlike expressions of distress. For example, other physical symptoms of trauma that children might display include regression to previous physical or emotional stages (e.g., wetting the bed, encopresis, thumb sucking, overdetermined clinging to transitional objects). A sudden, overwhelming increase in the child's anxiety might also manifest itself in physical symptoms such as panic or asthma attacks, stress-related diarrhea, or a marked lack of appetite. Given the nature of interparental violence and the child's dependent role with each parent, a number of interpersonal trauma symptoms may be expressed (e.g., clinging to the mother either out of fear that she or the child will be harmed or killed by the abuse; intense fear of the perpetrator, perhaps expressed in an adamant refusal to visit or to be alone with him; increased hostility with siblings; complete withdrawal from friends; fear of the parent harming someone else; or a preoccupation with death).

This study also did not control for other possible traumatic experiences to which the child may have been simultaneously exposed. For example, other stressors or violence experiences, such as child sexual abuse or sibling violence, could contribute to the presence of PTSD symptoms and diagnosis in these children. Children living in poverty may be exposed to significant levels of community violence as well. Future studies would do well to take

these additional stressful events into account. Finally, this study, like most research on child witnesses to domestic violence, is cross-sectional and does not trace the child's pretrauma level of functioning to that experienced after the traumatic event(s). Yet, given the chronic nature of domestic violence, the extent to which these events may be part of the child's everyday experience remains unclear.

To summarize, the results of this study show that most children exposed to the emotional and physical abuse of their mothers exhibit symptoms of posttraumatic stress, although few qualify for a full PTSD diagnosis. Thus, it is important to ask questions about family violence when diagnosing and evaluating children in the school and clinical setting. The child's trauma symptoms and adjustment problems may be associated with witnessing abuse, with a combination of witnessing violence and child abuse, or to some other event outside of the family. Clearly, assessment of the family context and environment is essential in efforts to understand expressions of traumatic distress in the child.

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