

Effects of Domestic Violence on Children's Behavior Problems and Depression

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The Children's Depression Inventory, Child Behavior Checklist, and Youth Self-Report were completed by mothers, fathers, and their 8- to 12-year-old children to assess the effects of various types of domestic violence on children's behavior problems and depression. One hundred and ten Israeli children from lower-class families were identified through social service records. Thirty-three of the children had been physically abused by their parents within the last 6 months, 16 had witnessed spouse abuse, 30 had been both victims and witnesses of domestic violence, and 31 had experienced no known domestic violence. Overall, domestic violence had effects on child development that varied in magnitude and nature depending on the type of domestic violence and who reported the information about the child's adjustment.

During the past 30 years, domestic violence and its effects on children's development have received considerable attention in the scientific and popular media (Cicchetti & Carlson, 1989). Although there is some evidence that children who are victims and/or witnesses of domestic violence have more social and emotional problems than their nonabused counterparts, findings have varied across studies. Because of the difficulties in recruiting samples, investigators have usually studied children from violent families that are characterized by multiple stressors (e.g., histories of drug and alcohol abuse, single parenting, shelter residence, and poverty) and multiple forms of maltreatment (i.e., neglect, sexual abuse, spouse abuse, and child abuse; Aber & Cicchetti, 1984). Unfortunately, it has been difficult to systematically measure these stresses and to evaluate how they exacerbate, moderate, or mask the effects of maltreatment on

development. The purpose of the present study was to ask how different forms of domestic violence (e.g., being a victim of physical child abuse, observing spouse abuse, and being both a victim and observer of physical abuse) affect behavior and development while controlling the effects of some of these other factors.

Most studies on the effects of domestic violence involve children who have experienced a variety of stressful life events in addition to domestic violence (Fantuzzo & Lindquist, 1989; Hilberman & Munson, 1978; Wolfe, 1987). Several psychologists have suggested that factors associated with abuse, such as single parenthood, divorce, poverty, substance abuse, shelter placement, and institutionalization, rather than abuse itself, may be at least partially responsible for the adverse "effects" of maltreatment (Elmer, 1977; Emery, 1989; Starr, 1979). Thus, although abused and nonabused children from families in low socioeconomic status (SES) do differ on various measures of social, emotional, and cognitive development (Egeland & Sroufe, 1981; Egeland, Sroufe, & Erickson, 1984; Kaufman & Cicchetti, 1989; Trickett, Aber, Carlson, & Cicchetti, 1991; Wolfe & Mosk, 1983), suggesting that maltreatment may indeed have adverse effects, further research is still needed to disentangle the effects of various negative life events.

Research on the effects of domestic violence has also been hindered by a tendency to rely on one source of information about children's behavior problems, usually the child's mother (Fantuzzo & Lindquist, 1989). In addition to the usual disadvantages of relying on only one informant (Achenbach, McConaughy, & Howell, 1987), this issue is of particular concern in studies focused on the effects of domestic violence. When mothers are the victims of spouse abuse, the perpetrators of physical abuse, or the partners of child abusers, their ability to accurately describe their children's behavior problems may be compromised (Jaffe, Wolfe, Wilson, & Zak, 1986a, 1986b; Wolfe, Jaffe, Wilson, & Zak, 1985). For example, mothers may project their own frustrations or guilty feelings onto their children, and distressed mothers are known to evaluate their children's behavior more harshly than objective observers do

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(Brody & Forehand, 1986; Hughes, 1988; Hughes & Barad, 1983). As a result, a better understanding of children's adjustment can be wrought when researchers obtain information from multiple informants (Achenbach et al., 1987). Although self-reports are also biased and thus should not be the sole source of information, they provide insight into children's adjustment and interpretation when used in conjunction with reports by other informants (Bryant, 1988; Fantuzzo & Lindquist, 1989; Reid, Ramey, & Burchinal, 1990). In this study, mothers, fathers, and the children themselves independently described the children's behavior, thereby ensuring a more comprehensive picture of the children's adjustment.

This study was also designed to identify the distinctive effects of experiencing different types of domestic violence. Children who are victims of physical abuse are more likely to display externalizing and internalizing behavior problems than children from comparison groups (Aber, Allen, Carlson, & Cicchetti, 1989; Hughes, 1988; Jaffe et al., 1986a, 1986b). These results must be viewed with caution, however, because methods and specific patterns of results vary so greatly across studies. In several studies, group differences were evident on only one measure or were entirely absent (Jaffe et al., 1986a, 1986b; Wolfe, Zak, Wilson, & Jaffe, 1986), and the effects of witnessing spousal violence are even less clear. Although there have been a number of laboratory studies suggesting that children who observe or overhear conflicts between adults tend to respond with emotional distress or aggression (Cummings, Iannotti, & Zahn-Waxler, 1985; Cummings, Zahn-Waxler, & Radke-Yarrow, 1981), generalization of these results to the effects of spousal violence is questionable. Direct research on the effects of observing violence is relatively new and has been hampered by the fact that most of the children studied reside in battered women's shelters and have often experienced physical abuse by one or both parents. Although shelters provide physical protection for women and children, residential transitions and the separations from fathers, friends, and neighborhoods can also be stressful. Researchers report that children who have witnessed their parents abusing one another sometimes resemble abused children, sometimes resemble comparison children, and sometimes fall between the two (Christopoulos et al., 1987; Hughes, 1988; Hughes, Parkinson, & Vargo, 1989; Wolfe et al., 1986).

Because the vulnerability to developmental problems increases as the number of stresses increases (Rutter, 1983; Werner, 1989), researchers have recently wondered about the potentially additive effects of being both a victim of child abuse and a witness of spouse abuse (Hughes et al., 1989). Abused witnesses display more externalizing problems than comparison children and usually differ from comparison children with respect to internalizing problems (Hughes, 1988; Hughes et al., 1989; Rosenbaum & O'Leary, 1981), but researchers have not yet been able to compare abused witnesses, abused children, and witnesses of spousal violence. Until recently, in fact, students of family violence failed to document all the types of violence occurring in the families studied, instead focusing only on the specific type of violence of immediate interest (Fantuzzo & Lindquist, 1989; Hughes et al., 1989). However, as many as 40% of the victims of physical child abuse are also exposed to spouse abuse (Straus, Gelles, & Steinmetz, 1980),

suggesting that children are often exposed to more than one type of family violence even when researchers document only child or spouse abuse.

We attempted to address this issue by carefully documenting the types of violence within each family and then comparing the effects of child abuse, spouse abuse, and the two combined in a single study in which the possible effects of such events as shelter or foster placement, divorce, or parental incarceration were systematically eliminated. Because domestic violence is not as closely associated with single parenthood in Israel as it is in the United States, and because shelters are less widely used, Israel provided a natural laboratory for conducting this study. By locating a sample of children who lived at home with both of their biological parents, we were able to examine the effects of domestic violence independent of confounding influences such as the effects of single parenthood and foster/shelter placement. We were also able to group children according to the types of violence they had experienced and thus to contrast the effects of the different types of violence that often co-occur in the samples recruited for study in the United States. Information about the target child's adjustment was obtained from multiple informants: the child's mother, the child's father, and the child himself or herself. It was predicted that children who had witnessed and/or who have been the victims of domestic violence would indeed be evaluated differently. Specifically, it was hypothesized that children who were both victims and observers of domestic violence would have the highest levels of externalizing and internalizing problem behaviors, because they experienced violence in two developmentally crucial relationships. Because both victims and witnesses learn to use aggression as a "way of solving problems," externalizing symptoms were considered especially likely, but some internalizing behavior problems were expected as a consequence of deviant, embarrassing, and demeaning family experiences. It was further hypothesized that children who were victims of physical abuse would display more problem behaviors and depressive symptoms than children who observed spouse abuse but who were not themselves victims of physical abuse. The children in the comparison group were expected to have the lowest levels of externalizing and internalizing behavior problems, as well as the lowest levels of depression.

Boys are more vulnerable than girls to all types of stressful life events (Zaslow & Hayes, 1986), and it was thus predicted that the boys who experienced domestic violence would be affected more profoundly than the girls. Potential sex differences in behavior problems, as manifest on the Child Behavior Checklist and Youth Self-Report, were to be masked in most analyses by reliance on the sex-adjusted *T* scores, which permit children of both sexes to be included in the same analyses, increasing the sensitivity to group differences on these dimensions.

Method

Subjects

One hundred and ten (61 boys and 49 girls) 8- to 12-year-old ($M = 10$ years and 7 months) children and their parents participated in this study. The children were recruited through social workers from the

Department of Family Services in Jerusalem and Tel Aviv, Israel. Social workers were asked to provide a detailed description of any incidents of domestic violence and to comment on the severity and chronicity of the abuse. They were also asked about the demographic characteristics and mental health of the family members. To obtain a homogeneous sample, we limited the sample to lower-class, two-parent families of Jewish origin. Social workers were asked to select from their files every case that met the selection criteria. Mentally retarded children and children who were victims of sexual abuse were excluded from the study. Likewise, children whose parents were mentally retarded or had diagnosed psychiatric disorders and children who were only victims of psychological maltreatment or neglect were not included in this study.

The families included in this study were representative of the Jewish social welfare population with respect to ethnic origin (75% had parents born in Middle Eastern or North African countries) and background characteristics. On average, mothers and fathers in this study had completed 9.4 years of formal education. All children lived with their biological parents; they had an average of three siblings.

The sample was divided into four groups. Three groups of children who had experienced some form of chronic domestic violence (with at least one incident in the previous 6 months) were compared with each other and with children in a matched comparison group. Group 1, *child abuse* ($n = 33$; 18 boys and 15 girls), included children who experienced physical abuse by one or both parents. Group 2, *spouse abuse* ($n = 16$; 8 boys and 8 girls), included children who had witnessed physical violence between their parents but who were not themselves abused. Group 3, *abused witnesses* ($n = 30$; 21 boys and 9 girls), included children who had both witnessed and been physically abused by one or both parents. Group 4, *comparison* ($n = 31$; 14 boys and 17 girls), comprised a group of children who had neither observed nor been victims of physical violence but who were matched with the other groups on a variety of demographic characteristics. There were no differences among the four groups with respect to background characteristics sometimes related to abuse and its effects, including SES, apartment size, unemployment, stressful life events, birth order, birth complications, and chronic or serious health problems.

The initial classification of families into the four groups was made by social workers who were asked (a) detailed questions about violent family relationships, and (b) to provide a detailed description of at least one incident of domestic violence in the past 6 months. (If they said the child was an abused witness, they were asked to describe one incident of physical abuse by a parent and one incident of witnessing spousal violence.) In addition, they were asked questions about the type, severity, and history of violence and were requested to provide information about any developmental problems the children were having. The information provided by the social workers was cross-validated by interviews with the parents and children. Specifically, husbands' and wives' responses to questions about hitting each other on the Areas of Change Questionnaire (Margolin, Talovic, & Weinstein, 1983) as well as mothers' and children's responses to questions about the parents' and children's reactions to anger-eliciting situations were used to corroborate social workers' reports.

Approximately 40 of the families referred by the social workers declined to participate in the study. Another 6 families were disqualified because one family member chose to discontinue participation after we began the data collection. Data were collected from all of the mothers and children and from 77% of the fathers (child abuse, 85%; spouse abuse, 75%; abused witness, 77%; and comparison, 71%). Many fathers initially agreed to participate in the study but repeatedly failed to keep appointments with the interviewers.

Procedure

Social workers were asked to refer all families in their caseload who met the screening criteria. We then assisted the caseworker in deter-

mining whether the family met the selection criteria. Social workers requested permission for project interviewers to contact the families before identifying the families to the researchers.

One of the project interviewers, naive with respect to the family history, contacted the parents by phone and asked them to participate in a research project concerned with the effects of stressful life circumstances on children's development. Upon consent, an appointment was made for two female researchers, both naive with respect to the family's history, to visit the home and conduct interviews with the child and his or her parents. The mother and father were separately interviewed by one researcher while another interviewed the child. After the interview was completed, the child was given a water toy and a box of crayons as a token of appreciation.

All questionnaires were translated from English to Hebrew and "back translated" to English to ensure accuracy of translation. The research assistant individually read each of the questionnaires to the respondent in a private room and wrote her or his responses on the appropriate coding forms. Questionnaires were coded and scored in Hebrew by assistants who were fluent in Hebrew.

Measures

Childhood depression. The Childhood Depression Inventory (CDI; Kovacs, 1981), designed as a self-report measure for children ranging in age from 8 to 13 years, was used to assess the extent of depression among children in the sample. Completion of this scale takes approximately 15 min. The CDI includes 27 questions referring to the child's emotional state during the past 2 weeks. The child indicates which of the three answers read to him or her by the interviewer best represents his or her status. On the underlying 3-point Likert scale, 0 indicates an absence of the depressive symptom, and 2 indicates the clear presence of the specific symptom. The total score for the 27 items is evaluated using norms derived from previous research with clinical and nonclinical samples (Kazdin, Moser, Colbus, & Bell, 1985; Knight, Hensley, & Waters, 1988). This questionnaire has been used in a variety of studies and has been found to have good internal reliability (alphas ranging from .80 to .94). Test-retest reliability across a 1-week period ranges from .38 in a normal sample to .87 in an emotionally disturbed sample (Saylor, Finch, Spirito, & Bennett, 1984). The poor test-retest reliability in the normal population is probably attributable to the limited variability.

Behavioral problems. The Youth Self-Report (YSR; Achenbach & Edelbrock, 1987) was used to evaluate children's perceptions of their behavior problems. On the YSR, the child responds to 118 questions with respect to how well they describe his or her behavior in the past 6 months. All items are answered on a 3-point Likert scale: 0 = *not true of me*, 1 = *somewhat true of me*, and 2 = *very true of me*. Youth self-report responses have been factor analyzed to yield seven narrow-band dimensions for boys and six narrow-band dimensions for girls, two broad-band scales (measuring internalizing and externalizing behavior problems) for both boys and girls, as well as an index of total behavior problems. The raw scores on each of the scales can be converted to sex-adjusted *T* scores, which permit researchers to include children of both sexes in analyses of the two broad-band scales and the Total Behavior Problems Scale. In the present study, *T* scores were created using norms from the original standardization sample. Achenbach and Edelbrock (1987) proposed that *T* scores of 70 or above (which correspond to the upper 2% of scores in the standardization sample) reflect clinically significant problems, whereas *T* scores greater than or equal to 63 indicate a need for clinical intervention.

Although this scale was developed for and was standardized using children 11 years of age or older, the manual suggests modifications for use with younger children, such as reading the questionnaire (Achenbach & Edelbrock, 1987). Pilot testing with 9- and 10-year-old Israeli

children suggested that they had a clear understanding of the questions when they were read by the interviewer. In the present sample, analysis of variance (ANOVA) procedures were used to compare scores assigned by children in different age groups and revealed no differences between 9- to 11-year-old children and 11- to 12-year-old children on the Internalizing and Externalizing Behavior Problem Scales.

Parents' evaluation of children's behavior problems. The parent forms of the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1981, 1983) were used to assess parents' perceptions of their children's behavior problems. The parents individually responded to 113 questions related to potential behavior problems on 3-point Likert scales: 0 = *not true of my child*, 1 = *somewhat true of my child*, and 2 = *very true of my child*. One hundred and three of these questions refer to symptoms included in the Youth Self-Report. When responses to these items were factor analyzed by Achenbach and Edelbrock, the following narrow-band dimensions were evident in a clinical sample: depression, somatic complaints, social withdrawal, hyperactivity, aggression, and delinquency. A second-order factor analysis revealed two wide-band dimensions: Externalizing and Internalizing Behavior Problems. Achenbach and Edelbrock have provided separate norms for boys and girls in three age groups, making it possible to assess problems developmentally. The raw scores on each of these dimensions were standardized separately for boys and girls by Achenbach and Edelbrock (1983), yielding sex-adjusted *T* scores that make it possible to include children of both sexes in one analysis.

Results

Agreement Among Informants

Preliminary analyses using Pearson product-moment correlations revealed poorer agreement among informants on the Child Behavior Checklist and Youth Self-Report than was reported by Achenbach et al. (1987). For the Internalizing dimensions, correlations among informants were as follows: mothers' and fathers' reports, $r = .24$; mothers' and children's reports, $r = .19$; and fathers' and children's reports, $r = .01$. On the Externalizing dimension, coefficients of agreement among informants were .30, .19, and .24, respectively. Mothers' and fathers' scores on the Internalizing dimension of the CBCL were poorly correlated with the children's scores on the CDI ($r_s = .07$ and $-.06$, respectively), whereas children's scores on the CDI and on the Internalizing dimension of the YSR were highly correlated ($r = .62$, $p < .01$). Coefficients of agreement were not systematically better in any group. Because the different informants obviously had very different perspectives on the children's behavior, all further analyses treated the reports by different informants separately.

Children's Reports of Depression and Behavior Problems

A two-way (Group \times Sex) multivariate analysis of variance (MANOVA) was used to compare the responses of children who experienced any violence (i.e., the *domestic violence* group included all children in the child abuse, spouse, and abused witness groups) with the responses of children in the comparison group on three dependent measures: the total CDI score and the Internalizing and Externalizing *T* scores of the Youth Self-Report. The multivariate main effect for group was significant, $F(3, 104) = 6.34$, $p < .001$, and subsequent univariate tests revealed significant differences on all three dependent measures

Table 1
Differences Between Children Who Have and Have Not Experienced Domestic Violence on the Childhood Depression Inventory (CDI) and the Youth Self-Report (YSR): Means and Standard Deviations

Measure	Domestic violence ($n = 79$)	Comparison ($n = 31$)	<i>F</i>	<i>df</i>	<i>p</i>
CDI					
<i>M</i>	10.75	6.13	16.72	1, 106	.00
<i>SD</i>	6.20	4.21			
YSR					
Internalizing					
<i>M</i>	54.49	48.61	10.68	1, 106	.01
<i>SD</i>	9.72	7.82			
Externalizing					
<i>M</i>	48.39	41.39	11.74	1, 106	.01
<i>SD</i>	10.92	9.92			

(see Table 1). There were no significant multivariate effects for sex or sex by group.

Differences among the four groups in children's reports of their behavior problems and depressive symptomatology were then analyzed using a two-way (Group \times Sex) MANOVA with the total Childhood Depression Index score and the Externalizing and Internalizing *T* scores as dependent variables. The multivariate main effect for group was significant, $F(9, 244) = 2.78$, $p < .01$, and subsequent univariate tests revealed significant effects on all three dependent measures (see Table 2); planned comparisons showed that the children in the abused witness, child, and spouse abuse groups had significantly higher depression scores on the CDI than children in the comparison group, although the mean scores of children in the three domestic violence groups did not differ statistically from each other. Children in the child and abused witness groups also reported significantly more internalizing and externalizing behavior problems than children in the comparison group. Although the scores assigned by the children in the spouse abuse group were higher than those assigned by children in the comparison group, these differences were not statistically significant.

The multivariate main effect for sex was not significant, and thus, further tests of sex differences were not conducted. However, the multivariate Group \times Sex interaction was significant, $F(9, 244) = 1.89$, $p = .05$, and univariate analyses revealed a significant interaction effect on the Externalizing Behavior Problem Scale scores, $F(3, 102) = 4.13$, $p < .01$. Girls in the child ($M = 56.00$) and spouse ($M = 48.25$) groups reported more externalizing behavior problems than did boys ($M_s = 44.06$ and 45.50 , respectively) in these groups, whereas girls in the abused witness ($M = 46.22$) and comparison ($M = 39.82$) groups reported fewer externalizing behavior problems than did boys ($M_s = 50.71$ and 43.29 , respectively). However, some of the critical cells had very few subjects, so these results should be viewed with caution.

Parental Reports of Children's Behavior Problems

An initial two-way (Group \times Sex) MANOVA comparing maternal reports (the Internalizing and Externalizing scores of the

Table 2
Group Differences in Scores on the Children's Responses to the Childhood Depression Inventory (CDI) and the Youth Self-Report (YSR): Means and Standard Deviations

Measure	Child (<i>n</i> = 33)	Spouse (<i>n</i> = 16)	Abused witness (<i>n</i> = 30)	Comparison (<i>n</i> = 31)	<i>F</i>	<i>df</i>	<i>p</i>
CDI							
<i>M</i>	10.52 ^a	9.81 ^b	11.50 ^c	6.13 ^{abc}	5.13	3, 102	.01
<i>SD</i>	7.08	5.08	5.79	4.21			
YSR							
Internalizing							
<i>M</i>	54.73 ^a	50.63 ^c	56.30 ^{bc}	48.61 ^{ab}	4.70	3, 102	.01
<i>SD</i>	9.92	9.55	9.30	7.82			
Externalizing							
<i>M</i>	49.48 ^a	46.88	49.37 ^b	41.39	3.97	3, 102	.01
<i>SD</i>	12.20	9.47	10.34	9.92			

Note. Similar superscripts denote contrasts significant at the .05 level.

CBCL) concerning children in the domestic violence and comparison groups yielded a significant multivariate main effect for group, $F(2, 105) = 5.01, p < .008$. Subsequent univariate tests indicated that children in the domestic violence group were believed to have more externalizing (but not more internalizing) behavior problems than children in the comparison group (see Table 3). There was no significant main effect for sex, but a significant Group \times Sex interaction was found, $F(2, 105) = 4.09, p < .02$. Univariate analyses revealed significant Group \times Sex interactions on both dependent variables, $F(1, 106) = 8.24, p < .005$ and $F(1, 106) = 4.21, p < .05$, for Externalizing and Internalizing Behavior Problems, respectively. In each case, girls in the domestic violence group ($M_{\text{ext}} = 69.91$ and $M_{\text{int}} = 69.41$) were believed to have more problems than boys ($M_{\text{ext}} = 62.53$ and $M_{\text{int}} = 62.93$), whereas girls in the comparison group ($M_{\text{ext}} = 57.17$ and $M_{\text{int}} = 61.65$) had fewer problems than boys ($M_{\text{ext}} = 62.08$ and $M_{\text{int}} = 63.50$). Corresponding multivariate and univariate analyses revealed no significant group or sex differences in paternal reports of the children's behavior problems.

Two-way (Group \times Sex) MANOVAs were then used to examine differences among the four groups in parental reports of children's behavior problems. Again, there were no significant group differences in the fathers' perceptions, but there was a

significant main effect for group, $F(6, 202) = 3.40, p < .01$, in the multivariate analysis involving maternal reports. Subsequent univariate analyses revealed a significant main effect on the Externalizing Behavior Problem Scale scores, with a non-significant trend evident on the Internalizing Behavior Problem Scale scores (see Table 4). A series of a priori contrasts revealed that mothers of children in the spouse and abused witness groups reported more externalizing behavior problems than did mothers of children in the comparison group. Although the mothers of children in the child abuse group assigned higher scores to their children on these dimensions than mothers of comparison group children did, none of these differences were significant. Mothers of children in the abused witness group reported higher externalizing (but not internalizing) scores than mothers of children in the child and spouse abuse groups combined.

There was a significant multivariate main effect for sex, $F(2, 101) = 3.08, p < .05$, and subsequent univariate analyses revealed sex differences in maternal reports of both internalizing and externalizing behavior problems. Mothers reported that girls had more internalizing ($M_{\text{girls}} = 66.71$ and $M_{\text{boys}} = 63.07$), $F(1, 102) = 4.53, p < .04$, and externalizing ($M_{\text{girls}} = 65.49$ and $M_{\text{boys}} = 62.43$), $F(1, 102) = 6.00, p < .02$, behavior problems than boys did. Multivariate analyses also revealed a significant Group \times Sex interaction, $F(6, 202) = 2.25, p < .04$, and subsequent univariate analyses (see Table 5) revealed a significant effect only on the Externalizing Scale scores. Post hoc contrasts indicated that mothers of girls in the spouse abuse, child abuse, and abused witness groups reported more externalizing behavior problems than mothers of boys in these groups did, whereas mothers of girls in the comparison group reported fewer problems than mothers of boys did.

Proportions of Children in Clinical Range

Chi-square analyses were conducted to compare the numbers of children in each group who had *T* scores of 63 or above (the 10th percentile) on the YSR and maternal CBCL indicating problems warranting clinical intervention (Achenbach & Edelbrock, 1987). A 2×4 (Intervention Range \times Group) chi-square

Table 3
Differences Between Maternal Reports of Children Who Have and Have Not Experienced Domestic Violence on the Child Behavior Checklist (CBCL): Means and Standard Deviations

CBCL	Domestic violence (<i>n</i> = 79)	Comparison (<i>n</i> = 31)	<i>F</i>	<i>df</i>	<i>p</i>
Internalizing					
<i>M</i>	65.56	62.48	3.15	1, 106	.08
<i>SD</i>	10.26	8.48			
Externalizing					
<i>M</i>	65.52	59.39	9.52	1, 106	.01
<i>SD</i>	10.63	10.02			

Table 4
Group Differences in Maternal Reports on the Child Behavior Checklist (CBCL): Means and Standard Deviations

CBCL	Child (<i>n</i> = 33)	Spouse (<i>n</i> = 16)	Abused witness (<i>n</i> = 30)	Comparison (<i>n</i> = 31)	<i>F</i>	<i>df</i>	<i>p</i>
Internalizing							
<i>M</i>	63.18	68.06	66.83	62.48	2.40	3, 102	.07
<i>SD</i>	9.85	9.18	10.99	8.49			
Externalizing							
<i>M</i>	61.42 ^{ab}	67.88 ^{ac}	68.77 ^{bd}	59.39 ^{cd}	6.74	3, 102	.00
<i>SD</i>	11.28	8.36	9.70	10.02			

Note. Similar superscripts denote contrasts significant at the .05 level.

analysis of the data presented in Table 6 indicated that, compared with mothers of children in the child abuse and comparison groups, more mothers of children in the abused witness and spouse abuse groups assigned their children scores above 63 on the Externalizing Behavior Problem Scale, $\chi^2(3, N = 110) = 13.63, p < .01$. Differences on the Internalizing Behavior Problem Scale were not statistically significant. When children were the informants, comparable chi-square analyses revealed significant differences only on the Internalizing Behavior Problem Scale, $\chi^2(3, N = 110) = 9.80, p < .02$. Children who were themselves abused were more likely to assign themselves scores in the intervention range than were children in the spouse abuse and comparison groups. When fathers were the informants, the chi-square analyses revealed no significant group differences.

Discussion

The results of this study suggest that one cannot discuss the effects of domestic violence without considering the source of information, particularly because the levels of agreement among informants were extremely low. Children's reports on

the CDI and the YSR suggested that victims and abused witnesses were more likely than children in the comparison group to report depressive symptoms as well as internalizing and externalizing behavior problems. These children acknowledged that they behaved in ways likely to get them in trouble with significant others (i.e., parents and teachers), and they reported behaviors revealing that they may feel sad, unwanted, and less healthy than their peers. In fact, children from the child abuse and abused witness groups were significantly more likely to obtain scores in the intervention range on the Internalizing scale of the YSR than were the children in the comparison group. Although their scores on the CDI were lower than the clinical cutoff, they were similar to those obtained by children in other abused samples, children referred to child guidance clinics, and children from a variety of inpatient populations (Allen & Tarnowski, 1989; Hughes, 1988; Hughes et al., 1989; Kaslow, Rehm, Pollack, & Siegal, 1988; Kazdin et al., 1985; Saylor et al., 1984; Seligman, 1975). These results suggest that the children who were physically abused by a parent may be "at risk" for clinical depression, a status that is associated with suicidal ideation and attempted suicide in adolescence (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983). Being

Table 5
Maternal Reports on the Child Behavior Checklist (CBCL): Means and Standard Deviations for the Group \times Sex Interactions

CBCL	Child (<i>n</i> = 33)	Spouse (<i>n</i> = 16)	Abused witness (<i>n</i> = 30)	Comparison (<i>n</i> = 31)	<i>F</i>	<i>df</i>	<i>p</i>
Internalizing							
Boys							
<i>M</i>	56.50	64.13	67.10	62.07	2.17	3, 102	.10
<i>SD</i>	11.57	7.90	10.72	8.82			
Girls							
<i>M</i>	67.33	71.63	72.67	57.18			
<i>SD</i>	7.72	7.43	5.41	10.65			
Externalizing							
Boys							
<i>M</i>	58.78	67.00	64.95	63.50	3.84	3, 102	.01
<i>SD</i>	9.84	8.21	12.18	9.37			
Girls							
<i>M</i>	68.47	69.13	71.22	61.65			
<i>SD</i>	7.00	10.52	6.02	7.87			

Table 6
Group Differences in the Percentages of Children With Behavior Problems in Intervention Range

Measure	Child (<i>n</i> = 33)	Spouse (<i>n</i> = 16)	Abused witness (<i>n</i> = 30)	Comparison (<i>n</i> = 31)	<i>F</i>	<i>df</i>	<i>p</i>
Self-report (YSR)							
Internalizing	27	6	27	3	9.80	3	.02
Externalizing	15	0	10	3	4.71	3	.20
Maternal report (CBCL)							
Internalizing	61	75	77	58	3.41	3	.33
Externalizing	49	75	77	36	13.62	3	.01

Note. YSR = Youth Self-Report; CBCL = Child Behavior Checklist.

either a victim or an abused witness thus appeared to tax the children's psychological resources beyond the effects of the stressful life ecologies in which they and the comparison children lived.

Witnessing spouse abuse did not affect children's evaluations of their adjustment as much as did being a victim of physical abuse or being a victim and witness of spousal abuse. Although witnesses reported more problems than children in the comparison group and fewer problems than children who were physically abused, the differences were not reliable. However, our findings are congruent with those of other researchers who have reported that, on a variety of measures, children who observe spouse abuse do not differ consistently from physically abused children, abused witnesses, or children in comparison groups (Hughes et al., 1989). Indeed, the fact that children in the spouse abuse group viewed their adjustment "in between" that of the comparison and physically abused children poses a challenge for future research. Perhaps the experience of observing spouse abuse affects children by a less direct route than physical abuse, with cognitive mechanisms playing a greater role in shaping the effects of observing violence than the effects of being its victim.

Mothers painted very different pictures of the children in the various groups. On the Child Behavioral Checklist, mothers who were abused by their husbands (spouse and abused witness groups) reported more externalizing behavior problems than did mothers of children in the comparison group, and a similar trend on the Internalizing dimension approached significance. Mothers of children in the child abuse group reported that their children had more problems than did mothers of children in the comparison group, but these differences were not statistically significant. Thus mothers reported effects of domestic violence on their children only when they themselves were victims of violence; when the children alone were victimized, their mothers did not report more behavior problems than mothers of children in the comparison groups.

These findings are both surprising and informative. Although some researchers have suggested that stress can influence mothers' reports of their children's behavior (Brody & Forehand, 1986; Hughes, 1988; Hughes & Barad, 1983; Hughes et al., 1989), few have used multiple informants to assess children's behavior problems, making it difficult to compare maternal

and filial perspectives. It may be that the parents of abused children are not cognizant of the behavior problems displayed by their children. When parents or their partners are abusive, they may consciously or unconsciously prefer not to recognize signs of the damage wrought, whereas children's self-reports may be biased defensively. Whatever the reasons for the differences between maternal and filial reports, the results of the present study underscore the importance of collecting information from multiple sources.

Regardless of their group affiliation, mothers also reported that their children had more behavior problems than the children acknowledged. As a result, a far greater proportion of the children were deemed in need of clinical intervention on the basis of the mothers' reports than on the basis of the children's self-evaluations. Indeed, according to the mothers, most of the children in the sample, including many of those in the comparison group, were in need of clinical intervention, whereas few of the youths reported problems great enough to place them in the intervention range. The tendency of the mothers to report high levels of problematic behavior may reflect a cultural difference in use of the CBCL, which has not yet been standardized in Israel. Mothers also reported more group differences in scores on the Externalizing dimension, whereas children reported differences on both the Internalizing and Externalizing dimensions. This may be because mothers are more attuned to disruptive behaviors than to more subtle internalizing symptoms.

Contrary to our hypothesis, fathers of children who were victims or witnesses of physical abuse were no more likely to report problem behaviors than fathers of children in the comparison group. There are several possible explanations. Because fewer fathers than mothers and children participated in the study, there may not have been sufficient statistical power to detect group differences in fathers' reports. It is also possible that the fathers were not sufficiently familiar with their children's problems, were unused to describing their children's development and functioning, had difficulty completing standardized measures, or tended (like the mothers) to mislabel their children's maladaptive behaviors.

Our prediction that the children in the abused witness group would experience the most problems because they were both victims and witnesses of domestic violence—experiencing

what Hughes et al. (1989) called a “double whammy”—was not supported by the data. Instead, the children and mothers of children in the child and abused witness groups reported similar types and levels of behavior problems on almost all measures. This suggested that the co-occurrence of victimization and witnessing did not add to the trauma experienced by children who experienced abuse as victims or witnesses. Obviously, this counterintuitive finding deserves further investigation; to date, no other researchers have been able to examine the independent and combined effects of spouse and child abuse.

Finally, our prediction that male victims or observers of domestic violence would fare worse than female victims was not supported. Indeed, although both children and mothers reported that girls in the comparison group had fewer problems than boys did, children and mothers reported that girls in the domestic violence groups had more problems and were more depressed than boys in these groups were. Sex differences in the effects of domestic violence have not been researched thoroughly in the past, and our results suggest unanticipated findings that deserve further investigation.

The results of this study have several important implications for the design of research on domestic violence. First of all, extensive efforts must be made to document the severity, chronicity, and nature of domestic violence to define children's experiences accurately. Although the children who experienced violence as both victims and witnesses did not manifest more serious problems than children who were either victims or witnesses, other researchers have suggested that this may happen, and the literature on the vulnerability to stress suggests that cumulative effects are likely to occur. Until the issue is resolved, therefore, it would be wise to differentiate among children who experience different types of abuse instead of grouping together children who have experienced very different types of maltreatment. We may have failed to identify these group differences in the present study because we did not include indexes of severity and chronicity, which may also influence the extent to which children are affected by domestic violence. Furthermore, because we still know so little about the impact of sexual abuse, it would be wise to refrain from including children who have experienced sexual abuse in samples of children who have experienced domestic violence.

The results of this study also underscore the importance of obtaining reports from multiple informants concerning children's adjustment. The discrepancies among informants illustrate the dangers of relying on only one informant, even though each may provide a valuable perspective on children's functioning. Had reliance been placed on any one of these sources of information, the results and conclusions would have been very different. Most researchers have relied heavily on maternal reports, often because the children studied were quite young. The results of the present study indicate that it is particularly important to pay attention to what children have to say about their own adjustment and that it might be necessary to develop and explore alternative methods for interviewing fathers. Perhaps open-ended interviews, in which fathers were asked to describe their children in their own words, would elicit more informative descriptions from fathers. Fathers' perspectives are especially important when, as in this study, fathers are the primary perpetrators of abuse.

References

- Aber, J. L., Allen, J. P., Carlson, V., & Cicchetti, D. (1989). The effects of maltreatment on development during early childhood: Recent studies and their theoretical, clinical, and policy implications. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 579–619). Cambridge, England: Cambridge University Press.
- Aber, J. L., & Cicchetti, D. (1984). The socio-emotional development of maltreated children: An empirical and theoretical analysis. In H. Fitzgerald, B. Lester, & M. Yogman (Eds.), *Theory and research in behavioral pediatrics* (Vol. 2, pp. 147–199). New York: Plenum Press.
- Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen. *Monographs of the Society for Research in Child Development*, 46(Serial No. 188).
- Achenbach, T. M., & Edelbrock, C. S. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University of Vermont Press.
- Achenbach, T. M., & Edelbrock, C. S. (1987). *Manual for the Youth Self-Report and Profile*. Burlington, VT: University of Vermont Press.
- Achenbach, T. M., McConaughy, S., & Howell, C. T. (1987). Child/Adolescent Behavioral and Emotional Problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, 2, 213–232.
- Allen, D. M., & Tarnowski, K. J. (1989). Depressive characteristics of physically abused children. *Journal of Abnormal Child Psychology*, 17, 1–11.
- Brody, G. H., & Forehand, R. (1986). Maternal perceptions of child maladjustment as a function of the combined influence of child behavior and maternal depression. *Journal of Consulting and Clinical Psychology*, 54, 237–240.
- Bryant, B. K. (1988). *The neighborhood walk: Sources of support in middle childhood* (Rev. version). Unpublished manuscript, University of California, Davis.
- Cicchetti, D., & Carlson, V. (Eds.). (1989). *Theory and research on the causes and consequences of child abuse and neglect*. New York: Cambridge University Press.
- Christopoulos, C., Cohn, D. A., Shaw, D. S., Joyce, S., Sullivan-Hanson, J., Kraft, S. P., & Emery, R. E. (1987). Children of abused women: I. Adjustment at time of shelter residence. *Journal of Marriage and the Family*, 49, 611–619.
- Cummings, E. M., Iannotti, R. J., & Zahn-Waxler, C. (1985). The influence of conflict between adults on the emotions and aggression of young children. *Developmental Psychology*, 21, 495–507.
- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to expressions of anger and affection by others in the family. *Child Development*, 52, 1274–1282.
- Egeland, B. E., & Sroufe, L. A. (1981). Developmental sequelae of maltreatment in infancy. In R. Rizley & D. Cicchetti (Eds.), *Developmental perspectives in child maltreatment* (pp. 77–92). San Francisco: Jossey-Bass.
- Egeland, B. G., Sroufe, L. A., & Erickson, M. (1984). The developmental consequences of different patterns of maltreatment. *Journal of Child Abuse and Neglect*, 7, 459–469.
- Elmer, E. (1977). A follow-up study of traumatized children. *Pediatrics*, 59, 273–279.
- Emery, R. E. (1989). Family violence. *American Psychologist*, 44, 321–328.
- Fantuzzo, J. W., & Lindquist, C. U. (1989). The effects of observing conjugal violence on children: A review of research methodology. *Journal of Family Violence*, 4, 77–94.
- Hilberman, E., & Munson, K. (1978). Sixty battered women. *Victimology*, (3–4), 460–471.

- Hughes, H. (1988). Psychological and behavioral correlates of family violence in child witnesses and victims. *American Journal of Orthopsychiatry*, 58, 77-90.
- Hughes, H., & Barad, S. (1983). Psychological functioning of children in a battered women's shelter: A preliminary investigation. *American Journal of Orthopsychiatry*, 53, 525-531.
- Hughes, H., Parkinson, D., & Vargo, M. (1989). Witnessing spouse abuse and experiencing physical abuse: A "double whammy?" *Journal of Family Violence*, 4, 197-209.
- Jaffe, P., Wolfe, D., Wilson, S., & Zak, L. (1986a). Family violence and child adjustment: A comparative analysis of girls' and boys' behavioral symptoms. *American Journal of Psychiatry*, 143, 74-77.
- Jaffe, P., Wolfe, D., Wilson, S., & Zak, L. (1986b). Similarities in behavioral and social maladjustment among child victims and witnesses to family violence. *American Journal of Orthopsychiatry*, 56, 142-146.
- Kaslow, N. J., Rehm, L. P., Pollack, S. L., & Siegal, A. W. (1988). Attributional style and self-control behavior in depressed and nondepressed children and their parents. *Journal of Abnormal Child Psychology*, 16, 163-175.
- Kaufman, J., & Cicchetti, D. (1989). Effects of maltreatment on children's socioemotional development: Assessments in a day-camp setting. *Developmental Psychology*, 25, 516-524.
- Kazdin, A. E., French, N. H., Unis, A. S., Esveltd-Dawson, K., & Sherrick, R. B. (1983). Hopelessness, depression, and suicidal intent among psychiatrically disturbed inpatient children. *Journal of Abnormal Child Psychology*, 11, 401-413.
- Kazdin, A. E., Moser, J., Colbus, D., & Bell, R. (1985). Depressive symptoms among physically abused and psychiatrically disturbed children. *Journal of Abnormal Psychology*, 94, 298-307.
- Knight, D., Hensley, V. R., & Waters, B. (1988). Validation of the children's depression scale and the children's depression inventory in a prepubertal sample. *Journal of Child Psychology and Psychiatry*, 29, 853-863.
- Kovacs, M. (1981). Rating scales to assess depression in school-age children. *Acta Paedopsychiatry*, 46, 305-315.
- Margolin, G., Talovik, S., & Weinstein, C. D. (1983). Areas of change questionnaire: A practical approach to marital assessment. *Journal of Consulting and Clinical Psychology*, 51, 920-931.
- Reid, M., Ramey, S. L., & Burchinal, M. (1990). Dialogues with children about their families. In I. Bretherton & I. Watson (Eds.), *Children's perspectives on the family* (pp. 5-28). San Francisco: Jossey-Bass.
- Rosenbaum, A., & O'Leary, K. D. (1981). Children: The unintended victims of marital violence. *American Journal of Orthopsychiatry*, 51, 602-609.
- Rutter, M. (1983). Stress, coping, and development: Some issues and some questions. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 1-41). New York: McGraw-Hill.
- Saylor, C. F., Finch, A. J., Spirito, A., & Bennett, B. (1984). The children's depression inventory: A systematic evaluation of psychometric properties. *Journal of Consulting and Clinical Psychology*, 52, 955-967.
- Seligman, M. E. P. (1975). *Helplessness*. New York: Freeman.
- Starr, R. H., Jr. (1979). Child abuse. *American Psychologist*, 34, 872-878.
- Straus, M. A., Gelles, R., & Steinmetz, S. (1980). *Behind closed doors: Violence in the American family*. New York: Anchor Press.
- Trickett, P. K., Aber, J. L., Carlson, V., & Cicchetti, D. (1991). Relationship of socioeconomic status to the etiology and developmental sequelae of physical child abuse. *Developmental Psychology*, 27, 148-158.
- Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, 59, 72-81.
- Wolfe, D. A. (1987). *Child abuse: Implications for child development and psychopathology (Vol. 10)*. Newbury Park, CA: Sage.
- Wolfe, D. A., Jaffe, P., Wilson, S. K., & Zak, L. (1985). Children of battered women: The relations of child behavior to family violence and maternal stress. *Journal of Consulting and Clinical Psychology*, 5, 657-665.
- Wolfe, D. A., & Mosk, M. (1983). Behavioral comparisons of children from abusive and distressed families. *Journal of Consulting and Clinical Psychology*, 51, 702-708.
- Wolfe, D. A., Zak, L., Wilson, S. K., & Jaffe, P. (1986). Child witnesses to violence between parents: Critical issues in behavioral and social adjustment. *Journal of Abnormal Child Psychology*, 14, 95-104.
- Zaslow, M., & Hayes, C. (1986). Sex differences in children's responses to psychosocial stress: Toward a cross-cultural context analysis. In M. E. Lamb, A. L. Brown, & B. Rogoff (Eds.), *Advances in developmental psychology* (Vol. 4, pp. 285-338). Hillsdale, NJ: Erlbaum.

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