

What Happens to Children When Their Mothers Are Battered? Results from a Four City Anonymous Telephone Survey

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Abstract This article presents results of a study examining what happens to children when domestic violence is committed against their mothers. While many investigations have pointed to child exposure to violence in homes where women are battered, few have examined direct reports about what happens to children when adult domestic violence occurs. This study collected direct reports from mothers on real-life events and was designed to go beyond earlier research by eliciting information on a larger array of family and contextual factors that may account for variation in mother's and their children's direct and indirect exposure to violence within the same home. Anonymous telephone interviews with 111 battered mothers in four metropolitan areas across the United States elicited detailed information from women on the violence against them and their children. Findings confirm the seriousness of co-occurring mother and child exposure to violence. The research also revealed that women and children were often injured while trying to protect each other from the abuser. The article concludes by recommending further enhancing collaboration between child protection and battered women's services; augmenting prevention and early intervention services to families experiencing adult domestic violence;

and focusing on protecting and increasing the safety of *both* children and their battered mothers.

Keywords Domestic violence · Children · Exposure · Battered mothers

Two decades ago, the U. S. Surgeon General identified violence against women as a significant public health risk (Health Resources and Services Administration 1986). Findings from the National Violence Against Women Survey confirmed this risk by revealing that 22.1% of the women interviewed were victims of intimate partner violence, 39% of the women victims were injured in these assaults, and 30.2% of these injured women received medical attention (Tjaden and Thoennes 2000).

Children's presence in homes where their mothers are being battered has received increased public attention as researchers have documented the degree to which children are present during violent events and are themselves the victims of direct physical abuse (Appel and Holden 1998; Edleson 1999; Fantuzzo and Mohr 1999; O'Leary et al. 2000). For example, the 1975 National Family Violence Survey of over 2,143 American families found that the men who were reported to most frequently beat their wives were also the ones most likely to report physically abusing the children in the home (Straus and Gelles 1990). Fifty percent of the fathers who abused their wives three or more times in a given 12-month reporting period also abused their children three or more times during that same period (see Straus and Gelles 1990, p. 409). More recently, McCloskey (2001) found that the existence of woman battering among the 363 women and children she interviewed increased the likelihood that the children would be abused by almost three times (odds ratio=2.77). While the rate of co-

Copies of the interview guide used in this study are available by writing to the Minnesota Center Against Violence and Abuse, School of Social Work, University of Minnesota, 105 Peters Hall, 1404 Gortner Avenue, St. Paul, MN 55108.

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occurring violence against women and children has been reported to vary from as low as 6% to as high as 97%, the majority of studies find a 30–60% rate of co-occurrence (Edleson 1999) and a median of 41% (Appel and Holden 1998). Lower rates are often found in samples drawn from the community, while higher rates are documented in studies that sample families identified by domestic violence and child protection service providers.

While it appears that violence against women is a statistical predictor of increased child abuse, the reverse may not be true. For example, Statistics Canada's Violence Against Women Survey of over 12,000 Canadian women found that the presence of children in a home was not a significant predictor of woman abuse (Johnson 1998). In a more recent study, Hutchison and Hirschel (2001) examined the influence of children's presence on incidents of woman battering. Contrary to their expectations, they found that the presence of children did not "alter the nature or severity of incidents [of woman abuse]...or the degree of injury sustained [by women], the decision-making process of women calling the police, or police behavior" (Hutchison and Hirschel 2001, p. 13, brackets added).

In efforts to uncover what happens when these forms of violence co-occur, a number of researchers have investigated the factors that mediate the level, types, and severity of the overlap between violence against women and children. These factors include the child's gender, birth order, the number of children in a home, and the child's relationship to the abuser. For example, Ross (1996) reports that female children were much less likely (by 47%) than their male siblings to be abused by violent men in their households. Prescott and Letko (1977) also found that the oldest male child was the most likely victim of child abuse when spouse abusers turned on their children. Bowker et al. (1988) found that the larger the number of children in a family with a spouse abuser the more likely children in that home were to be abused. Several other researchers have failed to find an association between the biological relationship of a male spouse abuser to children in the home and violence against those children (Gelles and Harrop 1991; McCloskey et al. 1995; Sullivan et al. 2000).

These few studies, spread over the past three decades, point to several factors that may mediate the risk to children in homes where adult domestic violence is occurring. Although some scholars have speculated about the ways children and women are both exposed to violence in their homes, few studies to date have investigated this matter directly (Appel and Holden 1998; Edleson 1999; O'Leary et al. 2000). This exploratory study reported here aimed to further develop our understanding of the ways children and their mothers experience direct (physical, sexual, verbal and emotional maltreatment) exposure to violence and how children also experience indirect (observing

violence against their mothers) exposure to violence. We analyzed data gathered from anonymous telephone interviews with battered mothers to answer the following questions: (1) How often and in what ways do both women and children experience direct or indirect exposure to violence in the context of domestic violence? (2) What factors distinguish mothers' and children's experiences with different forms of violence exposure?

This study purposefully did not use a guiding theory to define these research questions; it was more exploratory and descriptive in nature. In the sections below, we describe our study methods, report the results of our data analyses, and discuss their implications for policy, practice, and research.

Materials and Methods

Sample Recruitment

Domestic violence programs in four U.S. metropolitan areas assisted in recruiting respondents, all mothers who had experienced domestic violence, for this study. The areas included Dallas, Minneapolis/St. Paul, San Jose, and Pittsburgh. These cities were chosen both for their diverse geographical locations and for the diversity of their populations. Due to the sensitive nature of the interview topic—children's exposure and involvement in adult domestic violence—and the different requirements of the child maltreatment reporting laws in each of the states involved in the study, sample recruitment posed ethical dilemmas. As a result, voluntary, anonymous telephone interviews were conducted with mothers who were not in current crisis and focused only on incidents of violence that occurred at least 12 months prior to the interview date. All of the women were connected to domestic violence service agencies, which provided crisis and support services to women and their children. These features of our sampling and recruitment procedures allowed us to interview women about the violence against them and their children without putting them at risk for a report to child protection services as a result of volunteering for this study.

To recruit study participants, flyers and brochures describing the project and the interviews were sent to participating agencies. The flyers contained a toll-free number for interested women to call to find out more about the study. Phone lines were staffed with interviewers between 9:00 A.M. to 9:00 P.M. (CST) on Mondays, Wednesdays, and Fridays, during the seven-month study period. A bilingual Spanish–English interviewer was available for selected hours. The benefit of this recruitment procedure was that women could participate in the study without revealing their identity. Women who met study criteria, and verbally consented to participate, were given a

code number so that if the interview was interrupted, they could call back to complete the interview and still maintain their anonymity. Upon completion of the interview, women were given a second code number. This second number was faxed to the local collaborating agency at the end of the interview so that the agency could release a \$20 payment to the respondent or her proxy.

Sample Description

Anonymous telephone interviews were completed with 111 battered women using the methods described above. Information on the women's job status, income, transitional housing, and education were all reported for the time of the interview, which was at least 12 months after the violent incidents described during the interviews. Other independent variables, such as the length of the woman's relationship to her abuser, her experience of physical and emotional abuse and its effects on her and her children, were reported retrospectively for the period during which abuse was occurring. These differences in reporting periods are important to keep in mind in interpreting results of the study. We cannot determine, for example, if a woman's economic status at the time of the interview accurately reflected her earlier economic status at the time the abuse was occurring.

The average age of the women at the time of the interview was 34 years ($sd=7.70$), and at the onset of abuse was 25 years ($sd=6$). Caucasian women constituted 46% ($n=51$) of the sample, African-American women 32.4% ($n=36$), Latina women 11.7% ($n=13$), and other groups (Native American, Asian, and biracial/multiracial) constituted 10% of the sample ($n=11$). At the time of the interview, 47% of the women ($n=50$) reported completion of grade school, high school or GED as their highest education level, 43% ($n=46$) had received vocational training or completed some college coursework, and the remaining 9% ($n=10$) had completed a college degree or higher.

At the time of the interview, 44% ($n=47$) of the women were employed at least part time and 55.7% ($n=59$) were not employed. Fifty-six percent ($n=62$) of the women were in transitional housing (shelter, other temporary housing, or living with family/friends) and 44% ($n=49$) were renting or owned an apartment or home. At the time of the interview, 48% ($n=53$) of the 111 women had an annual income of less than \$10,000, and 52.5% ($n=58$) made \$10,000 or more annually.

Forty-six percent ($n=51$) of the women identified their abuser as their former or current spouse and 54% ($n=60$) identified him as a former or current boyfriend. The average length of a woman's relationship with the abuser was 8 years ($sd=6$), and the average length of abuse was 6 years ($sd=6$). It is important to note, however, that a woman's

abuse may not have ended at the point she considered the relationship to have ended. Seventy-nine percent ($n=88$) of the women lived with their abuser at the time of the abuse, while 20.7% ($n=23$) did not. Out of the 111 women, 18% ($n=20$) had one child, 40% ($n=44$) had two children, and 42% ($n=47$) had three or more children, with a total of 285 children in the 111 respondent's households. At the time of the interviews, the children ranged in age from 2 years old to 32 years, averaging 10 years old ($sd=5$ years). Forty-one percent ($n=117$) of the children were female. Thirty-four percent of the women ($n=38$) identified all their children as Caucasian, 32% ($n=36$) of the women identified all their children as African-American, 8% ($n=9$) identified them all as Latino. Twenty-two percent ($n=24$) of the women's children were either all mixed or there was no consistent racial group amongst the children. Finally, 4% ($n=4$) of the women identified all their children as being of another racial or ethnic group, including Native American, Asian, or Pacific Islander.

Definitions

There are several terms used in reporting this study that should be further clarified. We use the terms "direct exposure" to indicate a child's or woman's direct victimization at the hands of another. We define direct exposure as *any deliberate physical, sexual, verbal, or emotional violent act directed specifically at an intimate partner or family member with the intention of causing harm or intimidation*. We use "indirect exposure" to indicate *a child's observation of adult domestic violence between others and its aftermath*.

The violence exposure explored in this study only focused on abuse directed at the woman or child, by the abuser. In addition, the woman's use of abusive behavior toward the child as a direct result of her own abuse was explored. This study did not, however, look at child-to-parent violence. The ten items selected for the descriptive section of the study (see Table 1) explored the different types and ways that women and their children may experience direct and indirect exposure to violence within the same home, during and after an abusive incident to the woman or child by the abuser.

For inferential statistics, we focused on four items exploring violence exposure of the child, *during* violence towards the woman. The authors are aware that there are multiple forms of child maltreatment that have no connection to adult domestic violence or woman battering. However, in this study, child exposure to violence focused on the direct and indirect exposure of children *within the context* of the woman's abuse. The terms intentional or unintentional "hurt" were used to ask the women about the harm, injuries, or abuse their children experienced at the hands of the abuser.

Table 1 Frequency (and percentage) of mothers' reports of direct and indirect violence exposure

Variable	Never	Rarely	Sometimes	Frequently	Very Frequently	Total
Children accidentally hurt during adult domestic violence	69 (62.2)	28 (25.2)	9 (8.1)	2 (1.8)	3 (2.7)	111 (100)
Children intentionally hurt during adult domestic violence	82 (73.9)	18 (16.2)	4 (3.6)	6 (5.4)	1 (0.9)	111 (100)
Mother intentionally hurt by abuser while stopping him from abusing the children	57 (51.4)	15 (13.5)	20 (18.0)	11 (9.9)	8 (7.2)	111 (100)
Mother and children hurt in separate incidents by the abuser	68 (61.3)	17 (15.3)	9 (8.1)	12 (10.8)	5 (4.5)	111 (100)
Mother used harsh punishment on the children from her stress with the abuser	47 (42.3)	31 (27.9)	19 (17.1)	13 (11.7)	1 (0.9)	111 (100)
Children used as pawns by abuser to get to their mother	23 (20.7)	14 (12.6)	20 (18)	29 (26.1)	25 (22.5)	111 (100)
Woman unable to care for the children the way she wants due to her abuse	13 (11.7)	22 (19.8)	28 (25.2)	32 (28.8)	16 (14.4)	111 (100)
Abuser hurt the woman for children's acts	32 (28.8)	16 (14.4)	20 (18)	35 (31.5)	8 (7.2)	111 (100)
Abuser made the children watch him abuse their mother	88 (79.3)	14 (12.6)	3 (2.7)	5 (4.5)	1 (0.9)	111 (100)
Abuser punished the children excessively and blamed the mother for it	50 (45)	18 (16.2)	18 (16.2)	18 (16.2)	7 (6.3)	111 (100)

Data Collection Methods

The interview guide focused on the development and interaction of violence in a family with children, along with the responses of formal services and informal networks that may have become involved in families experiencing domestic violence. The first set of questions gathered data on the duration, frequency, and severity of abuse against the mother. Questions about emotional abuse to the mother were drawn from the short version of Tolman's (1989, 1999) Psychological Maltreatment of Women Inventory (PMWI). The two subscales of the 14-item PMWI short version have shown strong reliability (D/I , $\alpha=0.88$; V/E , $\alpha=0.92$) and have shown to be consistent with both the longer version of the scale and in discriminating among battered, distressed, and non-distressed groups (Tolman 1999). Physical violence questions were modeled after the Statistics Canada Violence Against Women Survey—Sections J and L (see Johnson and Sacco 1995). In addition, the Conflict Tactic Scales 2 (CTS2) Injury Scale (Straus et al. 1996) was used to develop questions about the physical effects of abuse on the women. The CTS2 Injury Scale has been reported to have the highest internal consistency ($\alpha=0.95$) among the five scales of the CTS2. In addition, Straus and his colleagues have reported that the Injury Scale has shown a high correlation with violence by men ($r=0.87$) and with sexual coercion by men ($r=0.87$), leading them to conclude that the scale has high construct validity.

Whereas content and item order for this area of the survey were similar to the content and order of the above-cited

instruments, administration and scaling of items were altered in this study. For consistency of response categories used during the long telephone interviews, we used the same 5-point Likert-type scale, which was anchored with 5 (*very frequently*) and 1 (*never*), for all items in this section. A set of questions was also developed and used to gather data on mothers' reports of their own and their children's exposure to violence, the impact of violence on other areas of their lives and on their children's involvement in violent events. Finally, demographic data were collected from each woman.¹ The survey interviews lasted an average of 75 min each.

Data Analyses

Statistical analyses progressed in several phases. First, descriptive statistics were generated and reviewed. Ordinal level responses to questions about violence exposure were recoded into dichotomous variables to determine how many of the families had a specific exposure occur within the home at least rarely. Ten items asked about the exposure of the woman and her children to violence (see Table 1). The first item asked: "How often did a child get accidentally hurt during an incident of adult to adult violence?" Possible responses were never (1), rarely (2), sometimes (3), frequently (4), and very frequently (5). This variable was

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later recoded into a dichotomous variable in which the “never” response was recoded as “0” and all other responses were recoded as “1” indicating that a child was accidentally hurt during an incident at least “rarely.”

Data on most demographic variables were originally collected in ordinal form, but were recoded into dichotomous variables for analysis. These variables were recoded as follows: If job status at the time of the interview was “employed part or full time” it was assigned a value of ‘1’ for bivariate analyses, while “unemployed” was given a value of ‘0’. The highest level of education achieved was recoded to ‘1’ if the mother had at least some college or post-secondary technical education, and ‘0’ if she had attained a high school education or less as her highest education level. Residence in a shelter or living with friends was assigned a value of ‘1’ for the variable ‘transitional housing,’ while renting or owning a home was assigned a ‘0.’ Furthermore, income of \$10,000 or more a year received a value of ‘1,’ while income of less than \$10,000 was given a value of ‘0’ in the analyses. The women’s racial and ethnic identity remained categorical.

Bivariate relationships were examined between women’s recoded demographic variables as well as their abuse experience, and the dependent violence exposure variables. This process was conducted in order to determine what factors seemed to be associated with violence exposure. For the bivariate analyses, only four of the ten original exposure items were included, as they focused on abuse directed at the child by the abuser during violence towards the mother. Finally, logistic regression analyses were conducted to determine the degree to which a set of independent variables together statistically predicted the exposure to violence. Several composite variables were developed for this purpose (see [Appendix](#)).

Results

The results discussed below are separated into three major categories: descriptive statistics, bivariate results, and multivariate findings.

Descriptive Statistics

Descriptive statistics are given for the series of questions the women were asked about their own exposure to violence and that of their children. [Table 1](#) presents more detail on the range of responses reported (Never to Very Frequently), while the description below summarizes all affirmative responses (Rarely to Very Frequently). The first question asked the mother to report how often a child was accidentally hurt during an incident of adult-to-adult violence in her home. Thirty-eight percent ($n=42$) reported

that that happened in their home at least rarely. The second question asked how often a child was intentionally hurt by the abusive partner while trying to stop the violence, and 26.1% ($n=29$) of the women reported it happened in their home at least rarely. In terms of how often the mother was intentionally hurt by the abuser while trying to stop violence directed at her child, this reportedly happened at least rarely to 48.6% ($n=54$) of the mothers. We also asked how often the abuser hurt the mother and child in separate incidents, and 38.7% ($n=43$) of the mothers reported it happened at least rarely. We asked the women how often the abuse resulted in her having a hard time dealing with her children and using harsh punishment on them, and 57.7% ($n=64$) said that this happened in their families at least rarely. The mothers were also asked how often she was unable to care for the children the way she wanted to because of being upset, hurt, or overwhelmed by the abuse; 88.3% ($n=98$) reported that this occurred at least rarely.

An abusive partner may use a child as a tool or pawn against their mother as a way to indirectly harass her. The women were asked how often this occurred in their homes, and 79.3% ($n=88$) reported that it happened. In addition, an abusive partner might hurt the mother as a result of her children’s wrongdoing. The women in our study were asked how often this occurred in their homes, and 71.2% ($n=79$) reported that it happened at least rarely. The mothers were also asked how often the abusers made the children watch him hit or sexually assault her, and 20.7% ($n=23$) of the mothers told us that this happened in their families. Finally, the women were asked how often the abuser blamed her for his excessive punishment of the children, and 55% ($n=61$) of them reported it happening in their homes. See [Table 1](#) for the complete range of responses to these questions.

Bivariate Findings

Bivariate analyses focused on differences between the demographic attributes of the mothers in our sample and their and their children’s exposure to violence (see [Table 2](#)). As described earlier, independent demographic variables and dependent variables, which were mostly ordinal, were recoded into dichotomous variables with ‘1’ indicating the presence of the prospective value and ‘0’ reflecting an absence of that value.

Mothers of children who were accidentally hurt at least rarely were in the relationship with the abusive partner for a shorter period of time than mothers of children who were not accidentally hurt ($t=2.71$; $p=0.008$). In terms of transitional housing, children who were accidentally hurt at least rarely had mothers significantly more likely to be in transitional housing than children who were not accidentally hurt ($\chi^2=6.65$; $p=0.010$). We also found that mothers of children who were accidentally hurt at least rarely

Table 2 Comparison of women's, abuser's, and children's demographics with violence exposure variables

Women's Independent Variables	Children accidentally injured during adult domestic violence			Children intentionally injured during adult domestic violence			Mother injured while stopping abuser from hurting child(ren)			Children made to watch their mother's abuse		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
Race/ethnicity												
<i>Caucasian</i>	35%	65%	100%	26%	74%	100%	55%	45%	100%	26%	74%	100
<i>Latina</i>	54%	46%	100%	39%	61%	100%	69%	31%	100%	31%	69%	100%
<i>African-American</i>	31%	69%	100%	22%	78%	100%	31%	69%	100%	17%	83%	100%
<i>Other</i>	55%	45%	100%	27%	73%	100%	55%	45%	100%	0%	100%	100%
Length of relationship with abuser	6 years	9 years	N/A	$t=2.71^{**}$	8 years	N/A	8 years	8 years	N/A	$t=.542$	13 years	N/A
Transitional housing												
<i>Yes (I)</i>	48%	52%	100%	$X^2=6.65^{**}$	71%	100%	52%	48%	100%	$X^2=.494$	74%	100%
<i>No (0)</i>	25%	75%	100%	22%	78%	100%	45%	55%	100%	14%	86%	100%
Physical Abuse	33.2	26.2	N/A	$t=4.60^{***}$	32.4	27.6	30.7	27.1	N/A	$t=2.23^*$	33.4	27.7
Emotional Abuse	58.6	51.4	N/A	$t=4.20^{***}$	58.6	52.6	56.3	52.1	N/A	$t=2.25^*$	58.4	53.1
Physical Effects	15.6	12.3	N/A	$t=4.09^{***}$	14.8	13.1	14.2	12.9	N/A	$t=1.61$	15.4	13.0
Emotional Impact	16.7	14.4	N/A	$t=3.53^{***}$	16.7	14.8	16.1	14.5	N/A	$t=2.38^*$	16.7	14.9

* $p<=0.05$; ** $p<=0.01$; *** $p<=0.001$

reported having been emotionally abused ($t=4.20$; $p=0.001$), physically abused ($t=4.60$; $p=0.001$), physically affected ($t=4.09$; $p=0.001$), and emotionally impacted ($t=3.53$; $p=0.001$) at a significantly higher rate than mothers whose children were not accidentally hurt. Further, mothers of children who were intentionally hurt by the abuser at least rarely were emotionally abused ($t=3.40$; $p=0.001$), physically abused ($t=2.42$; $p=0.001$), and emotionally impacted ($t=2.46$; $p=0.015$), at a significantly higher rate than mothers whose children were not intentionally hurt.

Hispanic mothers were hurt the most often when stopping the abuser from hurting the children, followed by White and ‘other’ mothers, and then Black mothers, who were hurt the least ($\chi^2=7.87$; $p=0.049$) in this type of situation. Mothers who reported being hurt by the abuser when stopping child abuse were emotionally abused ($t=2.25$; $p=0.027$), physically abused ($t=2.23$; $p=0.028$), and emotionally impacted ($t=2.38$; $p=0.019$) at a significantly higher rate than mothers who did not report being hurt in these circumstances. Mothers of children who were made to watch the abuse were more emotionally abused ($t=2.28$; $p=0.025$), physically abused ($t=2.97$; $p=0.004$), physically affected ($t=2.39$; $p=0.019$), and emotionally impacted ($t=2.15$; $p=0.034$) than mothers whose children were not made to watch the abuse.

Multivariate Findings

Logistic regression analyses were conducted to determine the degree to which a set of independent variables statistically predicted the exposure of women and their children to violence, during and after a violent incident. The independent variables were entered into the regression in steps. In the first step, composite scales indicating overall emotional abuse and physical abuse of the mothers were entered alone. These two composite scales were entered first as a result of our interest in the variability in exposure to violence that could be accounted for by the mother’s direct experience with emotional and physical abuse. In the next step, variables were entered into the analyses if they were conceptually related to the question of interest and if, in bivariate analyses, there was a statistically significant relationship at a p -value of 0.15 or better. In the third step, the ‘physical effects’ and ‘emotional impact’ of the abuse on the mothers were also entered.

The highest level of prediction that the step-wise entry of the independent variables contributed was 29.3%. The authors determined that the logistic regression analysis was not producing an equation that provided additional information to significantly predict the outcome of woman and child violence exposure in the context of adult domestic violence. This analysis problem may be due to the high degree of multi-collinearity of the variables used.

Due to this determination, detailed findings of the logistic regression analyses are not presented.

Discussion

Results of this study contribute new information on direct and indirect exposure of children to abuse occurring within the context of their mother’s own victimization. This study used some unique data collection methods that investigated needed knowledge of battered mothers and their children’s experiences with violence. This investigation is one of few to have systematically gathered detailed information from battered mothers about the nature of *both* their violence exposure as well as their children’s, at the hands of an abuser.

Large numbers of mothers in this sample reported co-occurring violence exposure of themselves and their children. Over a third reported their children were accidentally injured during an incident of adult domestic violence, and over a quarter reported the abusive partner intentionally injured their children when the child intervened to stop abuse of their mother. Almost half of the mothers said they were intentionally injured trying to stop the abuser from hurting her child, and almost a quarter of the mothers reported their children being made by the abuser to watch her being physically or sexually abused.

These findings confirm those of other researchers (see McCloskey 2001; McGuigan and Pratt 2001; Straus and Gelles 1990) and further reveal the seriousness of co-occurring violence exposure. They not only reveal the high magnitude of women’s and children’s exposure to violence that occurs simultaneously in the same home, but also reveal direct victimization of both women and children when each is trying to protect the other from the abuser’s violence.

Significant bivariate relationships revealed that mothers who were more severely abused and affected by the abuse were more likely to have children who were forced to watch their mothers being victimized and who were subsequently injured—accidentally or intentionally—during assaults on their mothers. An increase in the abuse and the impact of it on mothers was significantly associated with all investigated exposure variables. This is of serious concern, particularly in families with a number of children, as previous research has indicated that the higher the number of children in a family with a spouse abuser, the greater the likelihood that at least one of those children will be abused (Bowker et al. 1988).

Hispanic mothers were significantly more likely than others to be hurt when trying to stop the abuse of their children, while African-American mothers were the least likely to be hurt in such circumstances. Further research should be conducted to explore the relationships between race/ethnic markers and children’s intentional injuries

during adult domestic violence, including mediating factors that may explain why one racial or ethnic group may be more at risk than another.

Finally, it appears that the shorter a relationship with an abuser and a mother's residence in transitional housing (at the time of the interview) were significantly related to the accidental injury of children during adult domestic violence incidents. Living in transitional housing possibly reflects more severe violence against mothers and more children in "harm's way" during the violent incidents. Perhaps children whose mothers are in a shorter relationship with the abuser have fewer emotional ties to him, are therefore more apt to intervene, and consequently be accidentally injured. Another explanation may be that mothers whose children are abused or who intervene when their child is being abused are more apt to leave the relationship than the other women. Further research is needed to determine the dynamics involved in children's accidental injury during adult violence and their mothers' type and length of relationship.

This study had several limitations. First, most of the women who called our toll-free number were either in a shelter, or affiliated with one. Therefore the sample represents women and children who have most likely escaped more severe violence, and who were probably faced with multiple other stresses during this relocation. Secondly, mothers—not both mothers and children—reported on the violence exposure. Previous studies have found that mothers' reports of their children's exposures to her abuse are under-reported when compared to their children's reports (see O'Brien et al. 1994). At the same time, this sample of battered mothers willingly admitted that their children had been involved in or witnessed abuse, perhaps because they felt freer to disclose this information when anonymous. These women had little to lose or to gain in openly reporting their experiences. Finally, this study asked the women about their economic and housing status at the time of the interview, while asking them about abuse that occurred in the past (at least 1 year prior to the interview). Unfortunately, logistic regression analyses yielded no additional information on the combined effects of significant variables on violence exposures.

This study was one of the first to investigate the frequency and ways in which women and their children may be simultaneously harmed at the hands of their abuser. The magnitude of mothers' and children's exposure to violence in this study is alarming: up to 88% of the mothers reported being unable to care for their children the way they wanted to due to the abuse that they were enduring; 25% of the children were intentionally hurt while trying to stop their mother from being abused; and 50% of the mothers were hurt by the abuser while trying to stop their children from being abused. Battered women's and child protective services need to increase their collaboration in responding

to their clients' safety. Both mothers' and children's safety and well-being should be given priority, not just one without the other, since they are so apparently intertwined.

The findings illustrate how closely related violence against mothers and children may be in families and point to the need to prioritize providing safety for both mothers and children, as they are often protecting one another from the abuser. Prevention and early intervention should be augmented before the violence escalates to the point where women and children have to intervene in each other's abuse. Further policies and laws need to be established to protect *both* adult and child victims while also holding abusers accountable legally and helping them end their violent behavior.

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Appendix

Table 3 Composite variables used as independent variables in the analyses

Scale item	Types of questions
Emotional and verbal abuse	How often abuser called the woman names, swore at her, yelled and screamed at her, treated her like an inferior, monitored her time, used her money or didn't consult with her in making important decisions, was jealous or suspicious of the woman's friends, accused her of having an affair, interfered in her relationships with other family members, tried to keep her from doing things to help herself, blamed her for his problems, restricted use of telephone, and tried to make her feel crazy?
Physical abuse	How often did the abuser threaten to hit the woman with something, threw anything at her, pushed, grabbed, or shoved her, slapped her, Kicked, bit or hit her with his fist, beat her up, choked her, threatened to use or used a gun or knife, or forced her into any sexual activity she didn't want?
Physical effects on the woman	How often did the woman have a sprain, bruise, cut, pass out from being hit on the head, saw a doctor, have a broken bone from a fight with her abusive partner?
Emotional impact	How often did the abuse affect the woman's ability to parent the way she would like to, affect her ability to do what was needed around house, and maintain relationships with family and friends?

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