

## Physical Violence and Other Forms of Marital Aggression: Links With Children's Behavior Problems

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Two studies examined whether physical marital violence and other forms of marital aggression (e.g., threats, throwing objects) correlate with children's behavior problems in families marked by recent spousal violence. Study 1 included 55 families seeking marital therapy. Study 2 included 199 families at battered women's shelters. In the marital therapy sample, both physical marital violence and other forms of marital aggression correlated positively with children's externalizing problems. In the women's shelter sample, physical violence and other forms of marital aggression correlated positively with children's externalizing and internalizing problems. After accounting for the frequency of physical marital violence, forms of marital aggression other than physical violence still related to children's externalizing problems in the marital therapy sample and to children's internalizing problems in the women's shelter sample.

Physical marital violence, operationalized as physical assault on an intimate partner's body, is very prevalent among families in the United States, with up to 50% of married couples experiencing spousal violence at some point during the course of their marriages (Straus & Gelles, 1990; Straus, Gelles, & Steinmetz, 1980).<sup>1</sup> Relationships between physical marital violence and children's behavior problems have been investigated with some vigor over the past decade, and empirical evidence clearly indicates that children growing up in families marked by such violence are at increased risk for clinical

levels of behavior problems (Jaffe, Sudermann, & Reitzel, 1992; McDonald & Jouriles, 1991). Physical violence, however, rarely occurs in the absence of other forms of interspousal aggression and psychological maltreatment (e.g., insults, threats, kicking furniture, throwing objects), and the extent to which these other forms of aggression relate to children's behavior problems, in the context of physical marital violence, is unknown.

Social learning theories suggest that children's exposure to their parents' marital aggression, whether it involves physical assault of a parent, violence toward objects, or exchanges of insults and threats, increases the likelihood of problematic child behavior (Bandura, 1973; Grych & Fincham, 1990). Furthermore, empirical work has identified both the frequency and intensity of marital conflict as important parameters of this relationship (Grych & Fincham, 1990; Jouriles, Farris, & McDonald, 1991). In-

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<sup>1</sup> We recognize that male violence toward women is a problem of societal concern and that the injuries caused by men's physical aggression toward women are typically more severe than those caused by women's physical aggression toward men. In this study, however, our focus is on the relationship of interpartner aggression to children's behavior problems. Thus, we chose to examine both men's and women's aggression as opposed to male aggression only.

deed, the positive association between the frequency of children's exposure to marital conflict and levels of child behavior problems is quite robust, and experimental research indicates that children's exposure to physical aggression leads to disturbed child reactions more often than does exposure to "less intense" forms of aggression. However, the interplay and resulting effects of children's exposure to varying forms of aggression (i.e., aggression at varying levels of intensity and frequency) have yet to be adequately explored. For example, within families marked by recent physical marital violence, it is unclear whether (a) children's exposure to parents' physical violence overrides effects of exposure to other forms of interspousal aggression and psychological maltreatment; or, conversely, (b) the relatively less intense but often more frequent verbal aggression and psychological maltreatment (O'Leary & Jouriles, 1994) still contribute to children's problems even after accounting for the presence of the physical violence. Social learning theories offer contrasting hypotheses in regard to these questions: Children's exposure to physical marital violence may override the effects of exposure to "less intense" aggression (e.g., verbal arguments and psychological abuse), because living in the context of physical marital violence desensitizes or hardens children to such aggression. An alternative hypothesis is that children's exposure to physical marital violence sensitizes them to marital conflict in general, causing a greater awareness of and reaction to all forms of interparental aggression (see Bandura 1973; E. M. Cummings & Davies, 1994; Grych & Fincham, 1990, for variations of these hypotheses and further discussion). An assessment of links between forms of marital aggression other than physical violence and children's behavior problems, within families marked by physical spousal violence, would provide preliminary answers to these questions and simultaneously contribute to the refinement of theory on marital violence and children's behavior problems.

Demonstrations of robust relationships between forms of marital aggression other than physical violence and children's behavior problems, within families marked by physical spousal violence, can have important policy and clinical implications as well. Currently, many agencies and individuals concerned with the welfare of children (e.g., children's protective

services, family courts, family clinicians) consider the presence of physical marital violence in decisions pertaining to children's welfare; other forms of interspousal aggression, however, are often not considered at all or are given much less weight, particularly if physical marital violence is judged to be present. Establishing clear links between child problems and forms of marital aggression other than physical violence, within families marked by physical marital aggression, should lead to increased recognition of the importance of such marital interaction patterns to children's adjustment and, in turn, foster more informed decisions regarding children's welfare. The clear establishment of such links may also heighten clinicians' sensitivity to such family behaviors in the assessment, planning, and delivery of treatment.

Research examining the contributions of different forms of interspousal conflict to children's behavior problems has focused primarily on the additive effects of physical marital violence. To our knowledge, only one published study has explored verbal and physical aggression as separate constructs in relation to children's behavior problems (Fantuzzo et al., 1991). In that study, children in families characterized by both verbal and physical marital aggression or by verbal aggression alone displayed more externalizing behavior problems than children in nonaggressive families. Comparisons between the two aggressive groups—verbal aggression only versus both verbal and physical aggression present—revealed that children exposed to both forms of aggression demonstrated higher levels of externalizing behavior problems.<sup>2</sup> Other studies have examined the contributions of physical marital violence to children's behavior problems after accounting for parents' marital distress. In two studies, physical marital violence did not increase the likelihood of children's problems over and above parents' marital distress (Hershorn & Rosenbaum, 1985; Rosenbaum & O'Leary, 1981), but Jouriles, Murphy, and O'Leary (1989) found that physical marital violence did contribute significantly to a variety of children's problems after accounting for parents'

<sup>2</sup> It should be noted that there were lower levels of verbal aggression in the verbal aggression only group than in the verbal and physical aggression group, and differences between groups in the amount of verbal aggression were not controlled.

marital adjustment. In sum, existing research is equivocal regarding the contributions of physical marital violence to children's problems after accounting for marital distress and conflict. The contribution of forms of marital aggression other than physical violence to children's behavior problems after accounting for physical violence has not been examined.

The results of experimental research provide insight into the potential effects of spousal verbal aggression and psychological maltreatment on children's adjustment in the context of physical marital violence. Such research clearly supports the contention that witnessing adult physical aggression is more disturbing to children than witnessing other types of adult conflict (e.g., E. M. Cummings, Ballard, & El-Sheikh, 1991; E. M. Cummings, Vogel, J. S. Cummings, & El-Sheikh, 1989). However, children in families marked by physical marital violence, in comparison to children of nonviolent parents, react to a stranger's verbal hostility toward their mothers with increased support seeking and preoccupation with the expressed anger (J. S. Cummings, Pellegrini, Notarius, & E. M. Cummings, 1989). In other words, growing up in a home marked by physical marital violence appears to moderate the relationship between interadult verbal hostility and children's behavior. These results have been interpreted as consistent with the hypothesis that physical marital violence heightens children's sensitivity and reactivity to other types of conflict (E. M. Cummings & Davies, 1994; J. S. Cummings et al., 1989).

The present research was designed to examine the concurrent association of both physical marital violence and other forms of marital aggression (e.g., insults, threats, kicking furniture, throwing objects) with children's behavior problems in families reporting recent physical marital violence. This research was also designed to determine if the other forms of marital aggression contribute to children's behavior problems after taking physical marital violence into account. To ensure that the answers to these questions are generalizable and clinically robust, two separate samples, each marked by physical spousal violence, were used. In Study 1, we extended an analysis of previously published data from families seeking outpatient services for marital distress. It is important to note that physical marital violence has already been found to correlate with children's behavior

problems within this sample (Jouriles, Murphy, & O'Leary, 1989). In Study 2, participants were families in which the women had sought shelter for themselves and their children because of battering. Consistent with theory and data suggesting that the frequency of children's exposure to aggression relates to children's behavior problems and that exposure to very intense aggression may sensitize children to conflict in general, we hypothesized that acts of aggression not involving physical attacks on a partner's body would contribute to children's problems after accounting for physical marital violence.<sup>3</sup>

## Study 1

### Method

*Participants.* Participants were 55 families in which husbands and wives were seeking marital therapy for complaints that centered around communication difficulties and general marital dissatisfaction. In each family, the husband, wife, or both reported at least one incident of physical marital violence on the Conflict Tactics Scale (Straus, 1979; described below).<sup>4</sup> All families had at least one child between the ages of 5 and 12 years, and parents provided reports of child behavior problems on their oldest child within this age range, yielding reports for 23 boys and 32 girls. The mean age for boys was 8.3 years ( $SD = 2.5$ ) and for girls, 9.7 years ( $SD = 1.9$ ). For parents, the mean age was 31.1 years ( $SD = 13.9$ ) for fathers and 29.0 years ( $SD = 12.6$ ) for mothers. Couples were married an average of 10.2 years ( $SD = 6.0$ ), and the mean family income was approximately \$29,000. This sample was approximately 95% White.

*Procedure and measures.* Parents completed the following measures in separate rooms during their initial visit to the clinic.

We used the Conflict Tactics Scale (CTS; Straus, 1979) to measure marital aggression. The CTS con-

<sup>3</sup> For ease of discussion, we have referred to marital aggression and to husbands and wives in this manuscript. These terms are accurate with respect to our marital clinic sample. Some of the women in the shelter sample (20%), however, were not legally married to their partners.

<sup>4</sup> The previous publication involving this sample contained 87 families seeking marital therapy for communication difficulties and general marital dissatisfaction (Jouriles, Murphy, & O'Leary, 1989). Only spouses who reported physical marital violence were included in the present sample; hence, there is a discrepancy in the number of participants in the previous publication versus the present research.

tains items that measure three factors: (a) reasoning and the provision of information; (b) verbal and physical acts that exclude physical assaults on an individual but that are often considered to be aggressive, coercive, and controlling when performed in the context of an adult relationship; and (c) acts of physical violence against an individual (Barling, O'Leary, Jouriles, Vivian, & MacEwen, 1987; Hornung, McCullough, & Sugimoto, 1981; Jorgensen, 1977; Straus, 1979). The third and second factors were used in the present research to assess physical marital violence and other forms of marital aggression, respectively. The specific items on the CTS that were used to assess physical marital violence included the following: threw something at partner; pushed, grabbed, or shoved partner; slapped partner; kicked, bit, or hit partner with fist; hit or tried to hit partner with something; beat partner up; used a knife or fired a gun. Items on the CTS that were used to assess other forms of marital aggression included the following: insulted or swore at partner, stomped out of the room or house, did something to spite partner, threatened to hit or throw something at partner, threw or smashed or hit or kicked something.<sup>5</sup> Each spouse reported on his or her own aggression as well as on his or her partner's aggression. Spouses indicated the frequency of occurrence for each item during the past year on the following 7-point scale: 1 = never, 2 = once, 3 = twice, 4 = 3-5 times, 5 = 6-10 times, 6 = 11-20 times, 7 = more than 20 times. The alpha coefficient for the measure of physical marital violence in this sample was .83. The alpha coefficient for the measure of other forms of aggression was .81.

The Conduct Disorder and Personality Disorder subscales of the Behavior Problem Checklist (BPC; Quay & Peterson, 1979) were used to assess parents' reports of children's behavior problems. These subscales were derived from factor analyses of behavior ratings on both deviant and nondeviant children. The Conduct Disorder subscale measures aggressive, noncompliant, acting-out behavior (e.g., steals, is disobedient) and represents the externalizing dimension of child behavior problems. The Personality Disorder subscale represents the internalizing dimension (e.g., depressed, sad, lacks self-confidence). Each of these subscales has adequate internal consistency and test-retest reliability (Quay, 1977; Quay & Peterson, 1979) and successfully discriminates among children referred for psychological treatment, their siblings, and nonreferred peers (Speer, 1971).

*Data pooling.* Spousal ratings were combined to increase the reliability and validity of the rating scales (McNemar, 1969). Specifically, the physical marital violence score was obtained by averaging husbands' and wives' reports of their own and their spouses' physical marital violence. Spousal reports of other forms of interspousal aggression were similarly combined, as were parental reports of child

behavior problems. Pearson correlations between husbands' and wives' reports on the CTS and the BPC subscales were as follows: Physical Marital Violence,  $r = .31, p < .01$ ; Other Forms of Interspousal Aggression,  $r = .47, p < .01$ ; Conduct Disorder,  $r = .47, p < .01$ ; Personality Disorder,  $r = .34, p < .05$ .

## Results

Means and standard deviations for the marital and child measures are presented in Table 1. During the past year, 32% of the wives and 33% of the husbands had been kicked, bit, or hit with a fist in the context of a marital conflict; 17% of the wives and 7% of the husbands had been beaten up in the context of a marital conflict; and 4% of the wives and 2% of the husbands had been accosted with a knife or gun in the context of a marital conflict. With respect to other forms of marital aggression, 62% of the wives and 80% of the husbands threatened to hit or throw something at their spouse in the context of a marital conflict, and 56% of the wives and 88% of the husbands "threw or smashed or hit or kicked something" in the context of a marital conflict.<sup>6</sup>

As suggested by several authors (McMahon, 1984; Touliatos & Lindholm, 1975), local clinic norms were established for the BPC for com-

<sup>5</sup> We opted not to include the item "threatened with a knife or gun" on the physical violence scale because we were unable to determine whether it represented a physical or nonphysical act of violence. That is, threatening with a knife or gun can be nonphysical, such as threatening to get a gun and shoot one's partner, or it can be a physical act of violence, such as when a knife is held to a partner's throat. We did not include the items "sulked or refused to talk about an issue" or "cried" on the other forms of marital aggression scale because these items, relative to the others, lack face validity as indicators of aggression or psychological maltreatment. It should also be noted that a variety of labels have been applied to the items comprising the second factor (the factor we labeled *other forms of marital aggression*). These labels include *verbal aggression* (Straus, 1979), *psychological aggression* (Barling et al., 1987), and *medium intensity* (Jorgensen, 1977). We opted for *other forms of marital aggression* because we thought it was a better descriptor of the items than the other labels.

<sup>6</sup> If the husband, the wife, or both reported an act to have occurred, the act was judged to have been present.

Table 1  
*Means and Standard Deviations for Marital Clinic Sample*

Measures	<i>M</i>	<i>SD</i>
Marital		
Physical violence	20.9	6.9
Other forms of aggression	34.9	9.8
Child		
Conduct Disorder subscale	5.5	3.6
Personality Disorder subscale	4.0	2.7

*Note.* Scores on the marital measures reflect the average score for a couple. The possible ranges for the measures of physical violence and other forms of aggression were 14–98 and 10–70, respectively. Higher scores indicate greater levels of aggression. Similarly, higher scores on the child measures indicate greater levels of child problems.

parison purposes; mean scores for children referred to local clinics were used for this purpose (see Jouriles et al., 1989, for further details). The clinic means on the Conduct Disorder subscale were 10 for boys and 8 for girls. The clinic means on the Personality Disorder subscale were 6 for boys and 7 for girls. In the present sample, 17% of the boys and 22% of the girls had scores at or above the clinic means on the Conduct Disorder subscale; 26% of the boys and 22% of the girls had scores at or above the clinic means on the Personality Disorder subscale.

The Pearson correlation between physical marital violence and other acts of interspousal aggression was .59,  $p < .001$ . The Pearson correlation between the Conduct Disorder and Personality Disorder subscales was .34,  $p < .05$ . The Pearson correlation between the Conduct Disorder subscale and physical marital violence was .35,  $p < .01$ , and with other forms of interspousal aggression it was .42,  $p < .01$ . Neither physical marital violence ( $r = .14$ ) nor other forms of marital aggression ( $r = -.01$ ) correlated significantly with the Personality Disorder subscale. We computed a hierarchical regression analysis to assess the relative contributions of physical marital violence and other forms of marital aggression to the Conduct Disorder subscale. The Personality Disorder subscale was not used as a dependent variable in a regression analysis because of the pattern of results obtained with the zero-order correlations. As displayed in Table 2, other forms of

interspousal aggression related uniquely to the Conduct Disorder subscale of the BPC after accounting for the frequency of physical marital violence, child age, and child gender.

To aid the interpretation of these results, we also assessed whether physical marital violence related to children's behavior problems after accounting for our index of other forms of spousal aggression. As shown in Table 2, a hierarchical regression analysis in which children's age and gender were used as covariates indicated that physical marital violence failed to account for unique variance in the Conduct Disorder subscale after controlling for other forms of marital aggression.

## Study 2

In Study 1, an index of insults, threats, and violence toward objects during marital disputes contributed unique variance to children's externalizing behavior problems after accounting for physical marital violence. Study 2 was designed to extend the general findings of Study 1 to families characterized by higher levels of physical marital violence. The level of physical violence in families in Study 2 led the women to seek shelter outside of the home.

Table 2  
*Hierarchical Regression Analyses for Conduct Disorder Subscale Scores in the Marital Clinic Sample*

Measure	<i>R</i>	<i>R</i> <sup>2</sup> change	<i>F</i> change	<i>df</i>
1st analysis				
Controlled variables (children's age & gender)	.13	.02	0.48	2, 52
Physical aggression	.39	.13	7.79**	1, 51
Other forms of aggression	.47	.07	4.34*	1, 50
2nd analysis				
Controlled variables (children's age & gender)	.13	.02	0.48	2, 52
Other forms of aggression	.44	.18	11.40**	1, 51
Physical aggression	.47	.02	1.19	1, 50

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

## Method

**Participants.** Participants were 199 families with at least one child between the ages of 5 and 12 years. To be eligible, mothers had to have: (a) requested and received shelter for themselves and their children because of physical violence by an intimate partner, and (b) reported at least one incident of physical violence on the CTS during the past 12 months. The oldest child between 5 and 12 years of age was selected as the target child. Families were excluded if mothers did not speak English or if there was evidence of mental retardation in either the mother or the child. Families were recruited from three women's shelters, two in rural communities and the third in an urban community. Data were collected on 106 boys and 93 girls. The mean age for boys was 8.6 years ( $SD = 2.3$ ), and for girls it was 8.8 years ( $SD = 2.2$ ). The mean age for mothers was 31.3 years ( $SD = 5.0$ ); the mean education level for mothers was 11 years ( $SD = 2.4$ ). The mean family income was approximately \$13,500, and the median was \$8,000—these income figures included the batterers' income as well as the mothers'; however, many of the women were not sure of the batterer's income (i.e., it was kept hidden from them) and reported only their own. Thirty-nine percent of the children were White; 24% were African American; and 37% were Mexican or Latin American.

**Procedures and measures.** Mothers completed the CTS (described in Study 1) to assess both physical violence and other forms of aggression between adult partners. Each mother reported on both her own and her partner's aggression. Alpha coefficients for the physical violence index and the index of other forms of aggression were .88 and .78, respectively.

Mothers completed the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) to assess children's behavior problems. The CBCL is a widely used measure of children's externalizing and internalizing behavior problems. Both the Externalizing and Internalizing Disorder scales of the CBCL possess high internal consistency, test-retest reliability, and concurrent validity with other behavior problem checklists (Achenbach & Edelbrock, 1983). CBCL T-scores were used in all analyses.

Children over 8 years of age ( $n = 113$ ) completed the Coopersmith Self-Esteem Inventory (CSEI; Coopersmith, 1981). The CSEI yields a total score reflecting children's attitudes about parents, home, self, academics, and peers. The CSEI possesses high internal consistency, test-retest reliability, and predictive validity (Coopersmith, 1981).

Mothers and children completed the forms just described as part of a larger assessment battery during the shelters' intake procedure. Mothers and children were in separate rooms during the questionnaire completion period. Questionnaire items were read aloud to children and to mothers on their request.

## Results

Means and standard deviations for the marital and child measures are presented in Table 3. It should be noted that levels of physical violence for the families in this sample were substantially higher than for the families sampled in Study 1. During the past year, 80% of the women and 37% of the batterers were reported to have been kicked, bit, or hit with a fist in the context of a marital conflict; 73% of the women and 4% of the batterers were beaten up in the context of a marital conflict; and 14% of the women and 5% of the batterers were attacked with a knife or a gun in the context of a marital conflict. With respect to other forms of marital aggression, 49% of the wives and 92% of the husbands threatened to hit or throw something at their spouse in the context of a marital conflict, and 50% of the wives and 87% of the husbands "threw or smashed or hit or kicked something" in the context of a marital conflict.

Mean T-scores for both the Externalizing and Internalizing Disorder scales of the CBCL were above what is generally considered normal or nonproblematic, but they were below commonly used clinical cutoffs (T-scores at or above 70; Achenbach & Edelbrock, 1983). In this sample, 27% of the boys and 26% of the girls had Externalizing Disorder T-scores at or above 70; 25% of the boys and 26% of the girls

Table 3  
*Means and Standard Deviations for Women's Shelter Sample*

Measures	<i>M</i>	<i>SD</i>
Marital		
Physical violence	38.7	14.5
Other forms of aggression	43.9	11.0
Child		
CBCL Internalizing Disorder scale	62.8	10.4
CBCL Externalizing Disorder scale	61.8	10.6
Coopersmith Self-Esteem Inventory	55.7	24.6

*Note.* CBCL = Child Behavior Checklist. Scores on the marital measures reflect the average score for a couple. The possible ranges for the measures of physical violence and other forms of aggression were 14–98 and 10–70, respectively. Higher scores indicate greater levels of aggression. Similarly, higher scores on the child measures indicate greater levels of child problems.

had Internalizing Disorder T-scores at or above 70.<sup>7</sup>

The Pearson correlation between physical marital violence and other acts of interspousal aggression was .61,  $p < .001$ . The Pearson correlation between Externalizing and Internalizing Disorder scales was .78,  $p < .001$ . Children's self-esteem did not correlate significantly with either the Externalizing or Internalizing Disorder scales. Pearson correlations between the two marital aggression variables and child adjustment difficulties are presented in Table 4. Higher levels of physical marital violence and other forms of marital aggression related positively to mothers' reports of children's externalizing and internalizing behavior problems. Neither measure of marital aggression related significantly to children's reports of self-esteem.

We computed hierarchical regression analyses to assess the relative contributions of physical marital violence and other forms of marital aggression to children's externalizing and internalizing behavior problems. Given the pattern of results obtained with the zero-order correlations, self-esteem was not used as a dependent variable in the regression analyses. As shown in Table 5, other forms of interspousal aggression related uniquely to children's internalizing behavior problems after accounting for the frequency of physical marital violence and the children's age, gender, and ethnicity. Other forms of interspousal aggression did not contribute unique variance to children's externalizing behavior problems after accounting for the same variables.

Again, to aid the interpretation of our results, we assessed whether physical marital violence

related to children's externalizing and internalizing problems after accounting for other forms of spousal aggression. Hierarchical regression analyses, in which children's age, gender, and ethnicity were used as covariates, indicated that physical marital violence did not contribute unique variance to either externalizing or internalizing behavior problems after statistically controlling for other forms of marital aggression.

Finally, we explored whether a different pattern of relationships emerged in regression analyses conducted with boys and girls, separately. In these analyses, neither physical marital violence nor the index of other forms of interspousal aggression contributed significantly to either measure of child behavior problems after the other aggression index, child age, and child ethnicity were statistically controlled.

## Discussion

In families characterized by physical marital violence, other forms of interpartner aggression, such as verbal threats and hitting objects, correlated positively with children's behavior problems. Such correlations emerged for children's externalizing behavior problems in the marital clinic sample and for both externalizing and internalizing behavior problems in the women's shelter sample. In fact, the frequency of other forms of interspousal aggression was as closely linked to children's problems as the frequency of physical marital violence. Our findings also indicate that forms of spousal aggression other than physical violence contribute unique variance to children's behavior problems after accounting for the frequency of physical marital violence. In families seeking marital therapy, these results were obtained for children's externalizing behavior problems, and in families in which women were seeking shelter because of battering, these results were obtained for children's internalizing behavior problems. It is interesting to note that the frequency of physical marital violence did not contribute

Table 4  
*Correlations Among Measures of Violence and Child Adjustment for Women's Shelter Sample*

Measure of child adjustment	Physical violence	Other forms of aggression
CBCL Internalizing Disorder scale	.19**	.25**
CBCL Externalizing Disorder scale	.14*	.15*
Coopersmith Self-Esteem Inventory	.17	-.01

Note. CBCL = Child Behavior Checklist.

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

<sup>7</sup> If the more liberal, but often used, clinical cut-point of 65 is applied to the present sample, the proportion of children in the clinical range increases dramatically. Specifically, 42% of the boys and 31% of the girls had Externalizing Disorder T-scores at or above 65; 50% of the boys and 44% of the girls had Internalizing Disorder T-scores at or above 65.

Table 5  
*Hierarchical Regression Analyses for CBCL T-Scores in the Women's Shelter Sample*

Measure	R	R <sup>2</sup> change	F change	df
Externalizing Disorder Scale				
1st analysis				
Controlled variables (children's age, gender, & ethnicity)	.19	.04	2.51	3, 195
Physical aggression	.24	.02	4.39*	1, 194
Other forms of aggression	.25	.00	0.68	1, 193
2nd analysis				
Controlled variables (children's age, gender, & ethnicity)	.19	.04	2.51	3, 195
Other forms of aggression	.24	.02	3.80	1, 194
Physical aggression	.25	.01	1.38	1, 193
Internalizing Disorder Scale				
1st analysis				
Controlled variables (children's age, gender, & ethnicity)	.11	.01	0.80	3, 195
Physical aggression	.22	.04	7.49**	1, 194
Other forms of aggression	.28	.03	5.65*	1, 193
2nd analysis				
Controlled variables (children's age, gender, & ethnicity)	.11	.01	0.80	3, 195
Other forms of aggression	.27	.06	12.90**	1, 194
Physical aggression	.28	.00	0.46	1, 193

Note. CBCL = Child Behavior Checklist.

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

unique variance to children's behavior problems after accounting for other forms of inter-spousal aggression in either sample. Thus, physical spousal violence, even at very extreme levels, does not vitiate relationships between other forms of spousal aggression and problematic child behavior. In contrast, within families marked by the presence of physical marital violence, relationships between the frequency of physical violence and children's behavior problems disappear after accounting for verbal aggression and other forms of psychological maltreatment.

An important implication of the present research is that, within families marked by recent physical marital violence, the frequency of occurrence of spousal aggression other than physical violence (e.g., insults, threats, kicking furniture, throwing objects) appears to be at least as important as the frequency of physical spousal violence in predicting concurrent child behavior problems. These results add to a growing body of literature indicating that researchers need to go beyond the incidence and frequency of physical spousal violence to understand children's behavior problems within families marked by physical marital violence (e.g.,

Jouriles, Barling, & O'Leary, 1987; Wolfe, Jaffe, Wilson, & Zak, 1985). It is important to emphasize that the present results should not be interpreted to imply that physical marital violence is unimportant in relation to children's behavior problems. On the contrary, even in samples selected on the basis of the presence of physical spousal violence, the frequency of physical violence correlated with children's behavior problems. These results should also not be interpreted as contradictory to those of studies indicating that children in families characterized by physical spousal violence are at greater risk for behavior problems than children in families with nonviolent, but verbally conflictual, parents (e.g., Fantuzzo et al., 1991; Jouriles et al., 1989). The present research dealt only with families marked by physical marital violence, and the percentage of children exhibiting clinical levels of behavior problems in each of our samples was higher than that typically found in nonviolent comparison samples (McDonald & Jouriles, 1991). Rather, the present findings suggest that, within families marked by physical violence, the frequency of marital aggression other than physical violence



is likely to be important in understanding children's behavior problems.

One might find it surprising that physical marital violence did not contribute to children's behavior problems after accounting for other forms of interpartner aggression, whereas other forms of interpartner aggression did contribute after accounting for physical marital violence. In fact, at first glance, these results may appear inconsistent with theory and data asserting that frequency of exposure to aggression correlates positively with children's behavior problems (Bandura, 1973; Grych & Fincham, 1990). It is our impression, however, that our results are actually consistent with such theory and data. According to many of the participants in this research, physical marital violence occurred in the immediate context of other forms of interspousal aggression and psychological maltreatment. In other words, incidents of physical marital violence were not independent from incidents of other forms of interspousal aggression. On the other hand, many of our participants reported that there were numerous occasions in which insults or threats were not followed by physical marital violence. Thus, the addition of physical marital violence to a regression equation should not be interpreted as incorporating additional occasions during which children were exposed to interparental aggression. Rather, the addition of physical marital violence to a regression equation appears to reflect exposure to a specific form of interparental aggression—physical violence—that occurred in the immediate context of verbal aggression and other forms of psychological maltreatment. In addition, because the other forms of aggression occur with greater frequency than physical marital violence, the index measuring this construct may be a more sensitive indicator of the amount of interadult conflict in the household in comparison to the index of physical marital violence. It still might be argued that the present results are inconsistent with theory and data suggesting that children's exposure to intense interspousal aggression is more likely to lead to problematic behavior than exposure to less intense aggression (E. M. Cummings & Davies, 1994; Grych & Fincham, 1990). However, whether physical interparental aggression is more intense to a child than the other acts of interparental aggression assessed in this study remains an empirical question, particularly when such acts occur in a family

characterized by physical marital violence. For example, observing one parent slap the other may not necessarily be more intense to a child than hearing one parent threaten to kill or harm the other. Alternatively, one might question whether exposure to a single or few acts of physical marital violence disturbs children more than exposure to repeated occurrences of other forms of marital aggression that carry an ever present threat of escalation to physical violence.

It is interesting to consider why physical marital violence and other forms of marital aggression correlate only with children's externalizing behavior problems in the marital clinic sample but with both externalizing and internalizing behavior problems in the women's shelter sample. Although the present research was not specifically designed to address this question, several hypotheses are offered. It should first be noted that the two samples differed in size and demographics, which may partially account for the different pattern of findings. In addition, different measures were used to assess children's behavior problems in the two samples, and the correlation between the two subscales of child problems was much stronger in the women's shelter sample than in the marital clinic sample. Perhaps most noteworthy, however, is that both forms of marital violence were more frequent in the women's shelter sample, and many more women in the shelter sample experienced life-threatening violence. In addition, it is our belief that the acts of violence, as they appear on the CTS, differ qualitatively across the two samples (e.g., insults and pushes in the women's shelter sample were likely to have been much more vicious and threatening, on average, than insults and pushes in the marital clinic sample). It is also quite possible that the children in the shelter sample, relative to those in the marital clinic sample, associated their parents' insults, threats, and the kicking of furniture with the potential for much more severe interparental physical violence. In other words, the other forms of aggression may have been interpreted very differently by children across the two samples. For example, children in the shelter sample may have felt more frightened (e.g., they may have believed that verbal conflict might lead to physical violence in which their mothers would get seriously hurt) when their parents started fighting verbally than did children in the marital clinic sample; they may

be more sensitized to the potential for escalation to severe physical violence. Such an interpretation may be particularly associated with internalizing behavior problems. In addition, intense verbal aggression and psychological maltreatment, coupled with the increased threat of physical spousal violence, may correlate more strongly with children's anxiety, worrying, and other internalizing symptoms in the presence of other chronic stressors (e.g., poverty) that characterize many of the families in battered women's shelters (Jouriles, Bourg, & Farris, 1991; McDonald & Jouriles, 1991; Rutter, 1979).

It is also interesting to consider why other forms of marital aggression contribute unique variance, over and above physical marital violence, to externalizing child problems in the marital clinic sample but not in the women's shelter sample. Again, sample differences in demographics, the use of different measures of child behavior problems, and differences in the presence of potentially important third variables may partially explain the different pattern of results across studies. In addition, it may be the case that certain deleterious family interaction patterns (i.e., children's exposure to marital violence) show diminishing predictive power beyond some threshold because of a ceiling effect. More explicitly, a point may exist beyond which increased exposure to interparental aggression has little impact on the occurrence of children's externalizing behavior problems.

Clinically, the present research highlights the importance of a broad assessment of interpartner aggression. Such an assessment should, at a minimum, allow for detection of insults and threats exchanged between partners in addition to acts of physical violence directed at partners' bodies. Furthermore, acts of interpartner aggression not involving acts of physical violence should not be trivialized or ignored in treatment planning or decisions regarding a child's welfare. The potential for physical harm to children and the relative intensity of physical spousal violence (as well as the potentially life-threatening consequences of physical violence to the victims) may result in the importance of other forms of aggression being overlooked in courts and treatment settings. As noted by Tolman (1992), such an oversight could constitute a serious clinical error. The present findings suggest, from a child welfare perspective, that the full repertoire of aggressive spousal behaviors should be addressed during treatment.

Several limitations should be kept in mind when interpreting the results of the present research. Our findings were limited to families who were reporting occurrences of recent physical marital violence and who were seeking either outpatient services for marital difficulties or shelter because of battering. It is unknown whether a similar pattern of results would be obtained in other populations. The present research was both cross-sectional and correlational. Thus, the direction of the relationship between variables cannot be determined. Many limitations still exist in our methods for assessing interpartner aggression, and the CTS can certainly be criticized on many grounds (Straus, 1990). It should also be noted that, within the women's shelter sample, neither measure of marital aggression related to children's reports of self-esteem. Thus, the significant relationships documented in this research all involved parents' reports of both marital aggression and child behavior problems (the significant relationships in the marital clinic sample involved aggregated reports obtained from mothers and fathers; the significant relationships in the women's shelter sample involved only mothers' reports). This pattern of results raises the possibility that method variance may account, in part, for some of our findings. In conclusion, it is important to reemphasize that the present findings should not be interpreted to imply that physical marital violence is unimportant in relation to children's behavior problems. Such violence is likely to be extremely important in its own right and as a marker and potential moderator for other phenomena linked to children's problems (Jouriles, Farris, & McDonald, 1991).

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