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Physically Abused Women's Experiences of Sexual Victimization and their Children's Disruptive Behavior Problems

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Abstract

Objective—Despite the substantial co-occurrence of women's experiences of physical and sexual violence, very little is known about their separate and combined effects on child functioning. The present study examines whether sexual victimization experienced by physically abused women is associated with their children's disruptive behavior problems, after controlling for mothers' physical victimization and parent to child aggression. It also tests the hypothesis that maternal distress mediates the association between women's sexual victimization and their children's disruptive behavior problems.

Method—The sample includes 449 mothers and their children (4–8 years) who were recruited while residing in domestic violence shelters. Mothers reported on their experiences of physical and sexual victimization over the past year and their current symptoms of psychological distress. Trained diagnosticians interviewed mothers about their children's disruptive behavior problems.

Results—Approximately 75% of the women reported experiences of sexual victimization. Physically abused women's experiences of sexual victimization correlated positively with their children's disruptive behavior problems and their own psychological distress. The results of path analyses indicated that maternal psychological distress mediates the relation between women's experiences of sexual victimization and their children's disruptive behavior problems.

Conclusions—This research suggests that physically abused women's experiences of sexual victimization are important for understanding their children's disruptive behavior problems. Additionally, this research provides further evidence that maternal psychological distress is important for understanding how intimate partner violence might influence children.

Keywords

intimate partner violence; sexual victimization; co-occurrence of violence; children's disruptive behavior

The most obvious victims of male intimate partner violence (IPV) are the women against whom they target their violence. These women often suffer physical injuries, psychological harm and many additional, and perhaps less obvious, adverse outcomes such as social isolation (see Campbell, 2002; Holtzworth-Munroe, Smutzler, & Sandin, 1996, for a review). The children of these women are also at risk for a range of emotional and behavioral problems (Graham-Bermann & Levendosky, 2011; Kitzmann, Gaylord, Holt, & Kenny, 2003; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003), with disruptive behavior problems especially common (Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Ware, Jouriles, Spiller, McDonald, Swank, & Norwood, 2001). Most investigations of IPV and child adjustment have focused on mothers' experiences of physical violence perpetrated by a male partner (e.g., pushes, beatings). However, women with physically violent partners commonly experience other forms of abuse as well. In particular, they are at especially high risk for experiencing sexual violence (i.e., use of threats or force to obtain sex) from their male partners (Marshall & Holtzworth-Munroe, 2002; Peacock, 1998). This study examines whether physically abused women's experiences of sexual victimization by their intimate male partners are associated with their children's disruptive behavior problems.

In a large national sample, 30% of the women who reported experiencing physical IPV also reported experiencing sexual IPV (Krebs, Breiding, Browne, & Warner, 2011). The proportion of physically abused women who experience sexual IPV may be even higher in samples of women who have resided in domestic violence shelters (Graham-Bermann, Sularz, & Howell, 2011). Yet, despite the substantial co-occurrence of women's experiences of physical and sexual violence, very little is known about their separate and combined effects on child functioning. We know of only one study that has examined women's experiences of both physical and sexual violence in relation to their children's behavior problems. In that study, adolescents whose mothers reported experiencing both physical and sexual abuse had more behavior problems than adolescents whose mothers reported physical abuse alone (McFarlane et al., 2007).

The literature on IPV and children's adjustment points to maternal psychological distress as a mediator of the relation between women's experiences of physical IPV and their children's disruptive behavior problems. Specifically, a large body of research indicates that women who are victims of IPV experience psychological distress (e.g., Campbell, 2002; Holtzworth-Munroe et al., 1996), and there is abundant research indicating that maternal psychological distress is associated with children's disruptive behavior problems (e.g. Barry, Dunlap, Cotton, Lochman, & Wells, 2005; Forehand, Biggar, & Kotchik, 1998; Klein et al., 1997; Myers, Taylor, Alvy, Arrington, & Richards, 1992). Only a handful of studies, however, have examined relations among IPV, maternal distress, and children's disruptive behavior problems collectively. Findings from these studies are consistent in suggesting that maternal distress mediates the relation between women's experiences of physical IPV and child functioning (Levendosky & Graham-Bermann, 1998; Wolfe, Jaffe, Wilson, & Zak, 1985).

Sexual IPV is psychologically distressing (Bidwell & White, 1986; Frieze, 1983; Russel, 1982), and women who experience both physical and sexual IPV are more psychologically distressed than women who experience physical IPV alone (Bennice, Resik, Mechanic, & Astin, 2003; Campbell & Soeken, 1999; McFarlane et al., 2005; Shields & Hanneke, 1983). Given that women's psychological distress mediates the relation between physical IPV and child functioning, it follows that such distress might also mediate the association between women's experiences of sexual IPV and their children's disruptive behavior problems. In addition, it is conceivable that the increased psychological distress among women who have experienced both forms of IPV (sexual and physical) translates into increased risk for disruptive behavior problems among their children, as compared to children's whose mothers experienced physical IPV alone. It is also possible that men's sexual aggression

toward mothers will predict children's disruptive behavior problems because of its association with other disruptive family dynamics, such as parent-child aggression. That is, parent-child aggression might account for associations between mothers' experiences of IPV and their children's disruptive behavior problems (Jouriles, Barling, & O'Leary, 1987).

This study examines whether physically abused women's experiences of sexual IPV relate to their children's disruptive behavior problems. This study also examines maternal psychological distress as a mediator of the association between physically abused women's experiences of sexual IPV and their children's disruptive behavior problems. We hypothesize that physically abused women's experiences of sexual IPV will correlate positively with 1) their children's disruptive behavior problems and 2) their own psychological distress, and 3) that mothers' psychological distress will mediate the association between their experiences of sexual and physical IPV and their children's disruptive behavior problems.

Methods

Participants

Participants included 449 mothers and their 4- to 8-year-old children. In families with more than one child between 4 and 8, the youngest child (older than 4) was chosen to participate. At the time of participation, all children and their mothers were residing in domestic violence shelters. Families included in the study are those in which: 1) the mothers and children spoke English sufficiently well to complete the study procedures, 2) the mothers reported that they had been the victim of one or more incidents of physical IPV during the past 12 months, and 3) neither mother nor child reported serious mental illness or developmental delay. The sample included 186 African American families, 1 Asian American family, 91 Hispanic/Latino families, and 161 Caucasian families, and 10 biracial or "Other" families. Mothers averaged 29.3 years of age ($SD = 5.80$) and children were an average of 5.2 years of age ($SD = 1.42$). Prior to coming to the shelter, the mean annual income was \$8,924 ($SD = \$7,450$) for the mothers and \$18,776 ($SD = \$25,892$) for their partners. On average, mothers had 11.6 years of education ($SD = 2.47$). There were 247 boys and 202 girls in the sample. The mother's intimate partner was the biological father of the participating child for 54% of the children in the sample.

Procedures

Assessments—All research procedures were approved by the Institutional Review Board of the university at which the data were collected. Mothers were notified of the study during their first week at the shelter. Research assistants, who also served as shelter volunteers, conducted all interviews. Interviewers spent time establishing rapport with participants prior to obtaining informed consent and collecting data. Mothers were given the option of completing the measures unassisted (with the research assistant present in the room to answer questions) or having the items of the measures read aloud to them.

Measures

Physical and sexual IPV: Mothers reported their partners' physical and sexual IPV during the previous year on the physical and sexual aggression scales of the Conflict Tactics Scales—Revised (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The physical and sexual aggression scales were used as continuous measures of partner-to-mother physical aggression and sexual aggression, respectively. In addition, the physical aggression scale of the CTS2 was used to ensure that all participants met the selection criteria (i.e., reported at least 1 incident of non-sexual physical victimization by their partner in past year). The CTS2 includes 12 acts of physical violence (e.g. "My partner kicked me.") and 7 acts of sexual

aggression (e.g. “My partner used threats to make me have sex.”) rated for frequency on a 7-point scale ranging from 0 - “never” to 6 - “more than 20 times”. Coefficient alpha was .91 for the physical aggression scale and .86 for sexual aggression scale in this sample.

Maternal psychological distress: The Revised Symptom Checklist-90 (SCL-90-R; Derogatis, Rickels, & Rock, 1976) was used to assess mothers’ psychological distress. Mothers rated how much they have “been distressed by” 90 different symptoms of psychological distress in the past week. Examples of items include “Feeling easily annoyed or irritated”, “Temper outburst that you could not control”, and “Difficulty making decisions”. The items are rated on a 5-point scale ranging from 0 - “not at all” to 4 - “extremely”. The measure is widely used, has been validated in psychiatric and non-psychiatric populations, and has acceptable reliability (Derogatis, 1977). The raw score on the General Severity Index, which is the overall average score on the 90 items (coefficient alpha = .97), was used in analyses.

Children’s disruptive behavior problems: Trained diagnosticians administered a structured interview assessing children’s disruptive behavior problems. Mothers were asked to describe whether their children exhibited behaviors that constitute the criteria for DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Ed.; American Psychiatric Association, 1994) diagnoses of Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD). The interviews were designed to obtain information about specific child behaviors, rather than mothers’ evaluations about whether particular behaviors were perceived as problematic. Examples of child behavior were elicited and responses probed until sufficient information was gathered to identify the presence, frequency, and time since onset (e.g. duration greater than 6 months for ODD symptoms) of the criterion behaviors.

All interviews were audio-taped, and 37.5% ($n = 165$) were coded by a second rater to calculate inter-rater agreement on the individual items. Kappas ranged from .86 – .96 for the ODD symptoms and .65 – 1.0 for the CD symptoms. Four of the CD symptoms (forced someone into sexual activity, broken into car or building, run away from home, skipped school) were not used because no participants endorsed these behaviors. The aggregate number of ODD and CD symptoms endorsed was used as a continuous measure. This procedure has been utilized before in research examining correlates of disruptive behavior problems (e.g. Christ et al., 1990; Lahey et al., 1995). Coefficient alpha for the sum of ODD and CD symptoms was .83. For a subset of subjects ($n=238$), the sum of ODD and CD symptoms correlated .71 with the Child Behavior Checklist (Achenbach & Edelbrock, 1983) externalizing subscale.

Parent-child aggression: Mothers completed the Revised Conflict Tactics Scale Parent to Child Version (CTS-PC, Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) twice: once reporting their own and once reporting their partner’s aggression towards the target child in the past year. Mothers reported how often each of 13 physically aggressive acts occurred on a 6-point scale ranging from 0 - “did not occur” to 5 - “more than once a month”. Sample items include “hit child on the bottom with something like a belt, hairbrush, stick, or some other hard object”, “slapped child on the face, head, or ears” and “beat child up, that is, hit child over and over as hard as he could”. Coefficients alpha for mother-child and partner-child physical aggression were .58 and .80, respectively.

Results

All of the mothers reported experiencing physical IPV during the past year, with 61.5% reporting having been beaten up at least once. Seventy-five percent of mothers reported experiencing at least one act of sexual IPV during the past year, with 27.6% responding

affirmatively to the item *Used force to make me have sex*. Mothers who experienced sexual IPV reported experiencing more physical IPV, $t(232) = 7.62, p = .001$, than did mothers who had not experienced sexual IPV. Means, standard deviations and correlations among the study variables are presented in Table 1.

Correlations and t-tests were computed to examine the need to control for demographic variables (child sex, age, and minority status, and number of children in the home) in our hypothesis tests. Child minority status was associated with maternal psychological distress, $t(447) = 2.02, p = .04$, and with children's disruptive behavior problems, $t(447) = 4.04, p < .001$. Child sex was also associated with children's disruptive behavior problems, $t(447) = 3.64, p = .003$. Minority children and girls were reported to have lower levels of disruptive behavior problems. We thus included child minority status and sex as control variables in our analyses.

Sexual IPV, children's disruptive behavior problems, and maternal psychological distress

As indicated in Table 1, the hypothesis that physically abused women's experiences of sexual IPV would correlate positively with their children's disruptive behavior problems was supported, $r = .19, p < .001$, as was the hypothesis that experiences of sexual IPV would correlate positively with the women's own psychological distress, $r = .29, p < .001$.

Mediation Analyses

Path analyses using MPlus Version 3 (Muthén & Muthén, 2005) were used to evaluate the third hypothesis, that mothers' psychological distress would mediate the associations between their experiences of sexual and physical IPV and their children's disruptive behavior problems. Figure 1 depicts the model that was evaluated. Following guidelines of MacKinnon and colleagues (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; MacKinnon, Lockwood, & Williams, 2004), mediation was established using the asymmetric distribution of products test to evaluate the statistical significance of the indirect effect from experiences of physical and sexual IPV to children's disruptive behavior problems "through" maternal psychological distress, controlling for mother-child aggression, partner-child aggression, child sex, and child minority status. We used a 1000-replication bootstrap of the sample data to estimate bias-corrected 95% confidence intervals (CI) for the indirect effects. To interpret the magnitude of significant indirect effects, we report the proportion mediated (P_M) (Shrout & Bolger, 2002). P_M denotes the proportion of the relation between the predictor variables (mothers' experiences of physical IPV and sexual IPV) and disruptive behavior problems that is accounted for by maternal psychological distress, after accounting for the control variables. P_M is calculated by dividing the indirect effect (i.e., product of the hypothesized mediating pathways = $\alpha\beta$) by the total effect. Raw path coefficients were used in calculating effect sizes and confidence intervals. For ease of interpretation, standardized path coefficients are shown in the path model (Figure 1).

Mediation Results

As indicated by the path coefficients in Figure 1, mothers' experiences of sexual IPV were positively associated with her psychological distress, $b = .02, t(448) = 4.45, p < .0001$, 95% CI [.01, .03], which was in turn positively associated with children's disruptive behavior problems, $b = 1.13, t(448) = 4.27, p < .0001$, 95% CI [.61, 1.64]. Conversely, mothers' experiences of physical IPV were not associated with maternal psychological distress or with children's disruptive behavior problems. Tests of the indirect effects indicated that maternal psychological distress partially mediated the relation between mothers' experience of sexual IPV and their children's disruptive behavior problems, total effect = .058, $\alpha\beta$ (total indirect effect) = .02, 95% CI [.01, .04], $p < .01$, $P_M = .34$ (i.e., $.02 \div .056 = .34$).

Thus, 34% of the association between mothers' experience of sexual IPV and children's disruptive behavior problems was attributable to maternal psychological distress.

Discussion

Many physically abused women also reported experiences of sexual IPV. As hypothesized, physically abused women's experiences of sexual IPV were associated with their children's disruptive behavior problems, and maternal psychological distress partially accounted for this association. These findings emerged even after controlling for mothers' experiences of physical abuse, parent-to-child aggression, child sex, and minority status. To our knowledge, this is the first study to document an association between mothers' experiences of sexual IPV and their children's disruptive behavior problems, and to evaluate a process that may help explain the effect.

Research Implications

The findings from this study have several potentially important implications for research on family violence. The finding that a high proportion of physically abused women also experienced sexual IPV is consistent with those reported by other investigators (e.g., Graham-Bermann et al., 2011; Krebs et al., 2011). Similarly, the finding that women's experiences of sexual victimization are related to their children's disruptive behavior problems is consistent with those of other researchers who have found dimensions of IPV, apart from men's physical violence, to contribute to child problems (e.g., Levendosky & Graham-Bermann, 1998; Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996; McDonald, Jouriles, Minze, & Tart, 2009). One clear implication is that researchers interested in correlates and outcomes of IPV are likely to benefit from conceptualizing and measuring IPV more broadly to include women's experiences of sexual violence, in addition to physical violence. Specifically, the co-occurrence of physical and sexual IPV needs to be considered in such research. Findings attributed to effects of women's experiences of physical IPV may actually be due to the co-occurrence of physical and sexual IPV (and perhaps the occurrence of other unmeasured forms of violence as well).

Another noteworthy finding is the differential association of mothers' experiences of physical and sexual IPV with maternal distress and child outcomes. Mothers' sexual victimization was found to be associated with both maternal psychological distress and child disruptive behavior problems, whereas, physical victimization was not a unique predictor of either. These findings are particularly intriguing, as reports of physical victimization demonstrated greater variability; yet, despite this statistical advantage, sexual victimization accounted for more variance in the prediction of maternal distress and child disruptive behavior. It is possible, from the women's perspectives, that the physical violence measure assessed a less severe and invasive form of abuse, as compared with the sexual violence measure. Thus, experiences of sexual IPV related to maternal distress because of the perceived severity of the violence, and sense of personal violation associated with it. Another possible explanation for the greater impact of experiences of sexual than physical IPV is the possibility of a dose-response effect. All of the women in this sample experienced some form of physical IPV. Sexual IPV, within the context of physical IPV, may be more deleterious than physical IPV alone because it represents a better measurement of the *accumulation* of abusive experiences for women in this sample. It would be interesting to see if the same pattern of results would emerge in a sample of women identified on the basis of sexual IPV.

This research also provides further evidence that maternal psychological distress is important for understanding how women's experiences of IPV might influence their children's adjustment. Specifically, the relation between IPV and children's disruptive

behavior problems was partially accounted for by the mothers' psychological distress, which is related to, and presumably an effect of, experiencing physical and sexual violence. Mothers who are psychologically distressed due to stressful life events have been found to interact less with their children, express more hostility and irritability with their children, and be less consistent with discipline (for reviews see Downey & Coyne, 1990; Cummings & Davies, 1994). For children living in families marked by IPV, their mother's personal struggles may make her less available for support when the children need her assistance to cope with the family violence (Levendosky & Graham-Bermann, 2001).

Other explanations for the association between physically abused mothers' experiences of sexual IPV and their children's disruptive behavior problems merit consideration. For example, children whose mothers are both physically and sexually abused may be especially vulnerable to secondary trauma (emotional duress experienced by persons having close contact with trauma survivors; Figley, 1983). Several investigators have speculated that children act out in a disruptive way because of their own trauma symptoms (e.g., Marsee, 2008). It is also possible that sexual IPV is a marker for other dysfunctional individual or family processes that negatively influence children's disruptive behavior problems. White and colleagues (2008) reviewed the literature on "dual perpetrators", men who both sexually and physically abuse their partners, and cited that these men are more likely to have a drinking problem, a history of delinquency, be more accepting of male violence, and report a greater sense of loss of control and lower empathy. Similarly, Chiffriller, Hennessy, and Zappone (2006), and Monson and Langhinrichsen-Rohling (2002) suggested that dual perpetrators exhibit greater psychopathology and more severe levels of physical aggressiveness. In those families where the mother's abuser was the child's biological father (54% of the sample), the child may be at increased risk for antisocial behavior due to genetic factors, and to gene-environment interactions. In short, more complex models that incorporate other variables that could account for possible effects of sexual victimization should be developed and tested.

Limitations

Several points should be considered when interpreting the results of this study. First, the study was cross-sectional, limiting the ability to address the direction of effects between women's experiences of violence, maternal psychological distress, and children's disruptive behavior problems. For example, mothers' psychological distress may be due to their concern over their child's behavior. Second, this study cannot completely rule out the possibility that shared method variance or reporter bias inflated the relation between the measures of maternal distress and child problems. Although clinicians' ratings were used to measure child problems, these ratings were based on mothers' responses to a clinical interview. The clinicians' role was to filter and probe mothers' reports in an attempt to separate maternal perceptions of problems from their descriptions of their children's behavior. Third, this study only examined women's experiences of physical and sexual victimization. Studies examining multiple forms of IPV have found that women are likely to be victimized in a multitude of ways that render a cumulative effect (Basile, Arias, Thompson, & Desai, 2004). Consideration of other forms of IPV that we did not measure, such as psychological aggression or stalking, might provide a much more complete account of the link between IPV and children's disruptive behavior problems. Finally, this study included only families in which physically abused women sought shelter due to IPV; thus, the results may not generalize beyond this population.

Clinical Implications

Demonstrating that women's experiences of sexual IPV are related to children's disruptive behavior problems has clinical and policy implications. For example, organizations

concerned with child welfare (e.g., Children's Protective Services, family courts) often consider a history of physical IPV when making decisions regarding child welfare (Hazen et al., 2007). Other forms of IPV, such as sexual aggression directed toward the mother, are much less likely to be considered (Basile, 2002). Evidence of a link between maternal sexual victimization and child disruptive behavior problems may prompt greater consideration of women's sexual victimization. Over the past 20 years, researchers and women's advocates have sought to increase public awareness of intimate partner rape as a serious problem (MacFarlane et al., 2005; Marshall & Holtzworth-Munroe, 2002). Although spousal rape is illegal in every state, 27 states have partial exemptions or special requirements that limit the prosecution of a spouse for marital rape (McMahon-Howard, Clay-Warner, & Renzulli, 2009). The number of legal qualifications for prosecuting spousal rape attests to the serious lack of attention this topic has received. Documenting that men's sexual victimization of an intimate partner not only impacts the victim but also has negative implications for her children may help increase awareness that sexual abuse of women is a serious problem (White, McMullin, Swartout, Sechrist, & Gollehon, 2008).

The overriding implication of this study is the need to advocate for the measurement of multiple dimensions of IPV, particularly women's sexual victimization, in research, clinical and forensic settings. The assessment of both physical and sexual victimization has the potential to provide a more complete understanding of these women's experiences of IPV in a way that is relevant to their own and their families' functioning, and the present study provides compelling evidence that women with physically violent partners often experience sexual victimization, and that sexual victimization is associated with both maternal psychological distress and children's disruptive behavior problems. Clearly the sexual victimization of women merits further consideration in attempting to understand child behavior problems within violent families.

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Figure 1.

Path model linking mother's experiences of IPV to their children's disruptive behavior problems. Standardized path coefficients are denoted. Mother-child aggression, partner-child aggression, child sex, and child minority status are control variables. Solid lines depict statistically significant path coefficients. * $p < .01$; ** $p < .05$.

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Table 1

Correlations, means and standard deviations for measures among the study variables ($n = 449$)

Measures	1	2	3	4	5	6	<u>M</u>	<u>SD</u>
1. Physical aggression	--						21.8	14.68
2. Sexual aggression	.45*	--					8.2	9.38
3. Mother-child aggression	.06	.00	--				6.1	5.37
4. Partner-child aggression	.17*	.26*	.28*	--			5.8	7.73
5. Mother's distress	.21*	.29*	.18*	.16*	--		1.1	0.72
6. Children's symptoms	.08	.19*	.29*	.30*	.30*	--	5.6	3.88

* $p < .05$

Note: Mothers' distress = raw scores on SCL-90 – Revised, General Severity Index; Children's symptoms = sum of the number of Conduct Disorder and Oppositional Defiant Disorder symptoms;