Intimate Partner Violence, Coercive Control, and Child Adjustment Problems

Ernest N. Jouriles and Renee McDonald

J Interpers Violence published online 12 June 2014
DOI: 10.1177/0886260514535099

Article

Journal of Interpersonal Violence
1–16

DOI: 10.1177/0886260514535099
jiv.sagepub.com
SAGE

Intimate Partner Violence, Coercive Control, and Child Adjustment Problems

Ernest N. Jouriles[1] and Renee McDonald[1]

Abstract

Coercive control is a relationship dynamic that is theorized to be key for understanding physical intimate partner violence (IPV). This research examines how coercive control in the context of physical IPV may influence child adjustment. Participants were 107 mothers and their children, aged 7 to 10 years. In each family, mothers reported the occurrence of at least one act of physical IPV in the past 6 months. Mothers reported on physical IPV and coercive control, and mothers and children reported on children's externalizing and internalizing problems. Coercive control in the context of physical IPV related positively with both mothers' and children's reports of child externalizing and internalizing problems, after accounting for the frequency of physical IPV, psychological abuse, and mothers' education. This research suggests that couple relationship dynamics underlying physical IPV are potentially important for understanding how physical IPV leads to child adjustment problems.

Keywords

intimate partner violence, coercive control, child adjustment problems

[1]Southern Methodist University, Dallas, TX, USA

Corresponding Author:
Ernest N. Jouriles, Department of Psychology, Southern Methodist University, P.O. Box 750442, Dallas, TX 75275-0442, USA.
Email: ejourile@smu.edu

Each year, millions of children in the United States are exposed to parental physical intimate partner violence (IPV), which can range from one parent pushing, grabbing, or slapping the other to more severe violence, such as beatings or weapons use (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009; McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). IPV is associated with many different types of child adjustment difficulties across the span of development, from infancy through adolescence; the most consistently documented associations are with children's externalizing and internalizing problems (Evans, Davies, & DiLillo, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). In most empirical studies on this topic, IPV is operationalized as either a dichotomous variable reflecting the presence or absence of physical IPV, or as a continuous variable reflecting the frequency of acts of physical IPV. To date, empirical research on IPV and child adjustment problems has given little attention to the interpersonal dynamics that may underlie or characterize the IPV. Yet the broader literature on IPV often stresses the importance of such dynamics, and particularly the dynamic of coercive control (Langhinrichsen-Rohling, McCullars, & Misra, 2012). This study examines relations between coercive control (more specifically, coercive control as the motivation behind acts of IPV) and child adjustment difficulties.

From a social power perspective, coercive control reflects one person's attempts to control someone through the use of aversive stimuli, such as physical violence (Ehrensaft, Langhinrichsen-Rohling, Heyman, O'Leary, & Lawrence, 1999; Gray-Little & Burks, 1983). Among couples, it includes attempts to denigrate or restrict a partner's behavior, undermine a partner's self-image, or both. Coercive control is quite common, and both women and men engage in it, with over 40% of adult women and men reporting at least some coercive control in their relationships (Black et al., 2011). Coercive control has also been conceived as a motivating force behind IPV, and as a key factor for understanding different "types" of IPV (Langhinrichsen-Rohling et al., 2012). For example, in their typologies of violent couples, Johnson and colleagues (Johnson, 1995; Johnson & Ferraro, 2000; Kelly & Johnson, 2008) describe different patterns of relationship violence. One of these, originally labeled *patriarchal terrorism* and more recently *intimate terrorism*, is distinguished from other patterns by the motive to control. Specifically, with intimate terrorism, the physical IPV is motivated by, and is part of a broader pattern of, hostile, intimidating, contemptuous, and controlling behavior. In some couple, this pattern of controlling behavior is exhibited by only one partner; in other couples both parties are controlling and violent—a pattern labeled *mutual violent control*. This is in contrast to relationships in which the physical IPV is not motivated by coercive control. For

example, in some couples, IPV is theorized to arise occasionally in the context of arguments, when one or both partners have difficulty managing conflict and controlling their anger. "The dynamic [with these couples] is one in which conflict occasionally gets 'out of hand'" (Johnson, 1995, p. 285). In contrast, in physically violent relationships marked by coercive control, the physical violence is hypothesized to occur more frequently, and the pattern of controlling behavior is hypothesized to involve psychological abuse as well as physical violence (Johnson, 1995; Johnson & Ferraro, 2000; Kelly & Johnson, 2008), and several studies have yielded results consistent with this notion that coercive control differentiates types of violent couples (Felson & Outlaw, 2007; Graham-Kevan & Archer, 2003).

Although coercive control may be important for understanding physical IPV, its salience for understanding how IPV affects child adjustment is unknown. Theory, however, suggests that it may be important. Prominent models of how interparental conflict influences child adjustment emphasize the importance of children's perceptions of their parents' conflict as threatening (Davies & Cummings, 1994; Fosco, DeBoard, & Grych, 2007; Grych & Fincham, 1990). According to these models, children feel threatened if they perceive that parental conflict is likely to have negative outcomes for their own, their parents', or their family's well-being. Moreover, substantial research has found children's threat appraisals regarding parental IPV to be related to their adjustment problems, albeit more so for internalizing than externalizing problems (Rhoades, 2008).

There is evidence that among families in which physical IPV occurs, the frequency of physical IPV is associated positively with children's threat appraisals (McDonald, Jouriles, Tart, & Minze, 2009). However, the key question for this study is whether physical IPV prompted by the motive of coercive control is perceived as more threatening than physical IPV that occurs for other reasons. Because of the hostile, punitive, and threatening processes at the core of coercive control, we hypothesize that physical IPV motivated by coercive control may be especially threatening to children. Alternatively stated, we hypothesize that children perceive physical IPV that is motivated by coercive control to be more menacing (e.g., "Mom better do what Dad says because he can be really mean") than physical IPV that occurs for less malevolent reasons (e.g., "Wow, Dad's really mad at Mom."). This might occur because of verbal and/or nonverbal differences in the expression of physically violent acts and the responses they elicit, a broader pattern of intimidating or cruel behavior in the parental relationship, or any number of things potentially associated with coercive control that the children may have been exposed to. Regardless, exposure to IPV that results in these more menacing appraisals may be more likely to lead

children to become sensitized or hypervigilant to threat cues (e.g., a coercive-controlling parent becoming angry), which in turn might lead them to experience fear or anxiety. It might also prime children to act angrily or aggressively in situations involving minor or ambiguous provocation (Bascoe, Davies, Sturge-Apple, & Cummings, 2009).

The present research examines whether coercive control underlying parental acts of physical IPV relates to children's externalizing and internalizing problems. We examined these relations in a sample in which mothers reported at least one act of physical IPV in the past 6 months. We hypothesized first that coercive control (connected to acts of physical IPV) would relate to children's externalizing and internalizing problems, after accounting for the frequency of physical IPV and psychological abuse between parents. Because the frequency of physical IPV is associated with child adjustment problems, we controlled for it in our hypothesis tests. We did this to evaluate whether examining the phenomenon of coercive control adds incrementally in the prediction of child problems, helping to explain how adjustment problems among children exposed to IPV arise. In an attempt to better isolate coercive control underlying acts of physical IPV from other aspects of interparental conflict that might explain our findings, we also controlled for psychological abuse between partners. Although all behavior motivated by coercive control may be construed as abusive, not all acts of psychological abuse stem from the motive of coercive control. Thus, controlling for psychological abuse helps isolate IPV motivated by coercive control from psychological abuse motivated by coercive control as well as psychological abuse prompted by other motives. Also, because the frequency of psychological abuse between parents is associated with children's externalizing and internalizing problems after accounting for the frequency of physical IPV (Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996), controlling for psychological abuse eliminates it as a possible confounding variable.

Our second hypothesis was that children's threat perceptions would account for the associations between coercive control and children's externalizing and internalizing problems. This hypothesis was based on models highlighting the importance of children's threat perceptions in understanding associations between interparental conflict and child adjustment problems (Davies & Cummings, 1994; Fosco et al., 2007; Grych & Fincham, 1990). In our primary analyses for both hypotheses, we examined whether the overall level of coercive control underlying physical IPV (i.e., aggregated across the mother and partner) relates to child adjustment problems. However, as effects of coercive control may depend on who is engaging in it, we also conducted exploratory analyses considering mothers' and their partners' coercive control separately.

Method

Participants

As part of a larger study on IPV and child adjustment, families were called (from randomly drawn lists of phone numbers within specified census tracts) and asked to participate in a study on how families solve conflicts. Mothers answered screening questions for eligibility over the phone. Eligible families were those in which: (a) the mother lived with a biological child between the ages of 7 and 10 years, (b) the child had never received a diagnosis indicating an intellectual disability or developmental delay, (c) the mother and child spoke English well enough to participate in an interview conducted in English, and (d) the mother had been in an intimate relationship with a male partner for at least 5 of the previous 6 months. Although IPV occurs in same-sex relationships, the larger study from which these data were obtained, and thus our study, is limited to heterosexual couples. Of the 1,099 families who satisfied these screening criteria, 540 (49%) participated. As part of the larger study, mothers were asked about occurrences of physical IPV within their relationship with a male partner in the past 6 months. Of the 540 families who agreed to participate, 109 (20%) mothers reported at least one act of physical IPV within the relationship in the past 6 months. This prevalence rate for physical IPV is comparable with rates estimated from census data on dual-parent households with children (McDonald et al., 2006). Two subjects were dropped whose scores on study measures were extreme (>3.5 *SD* above the mean). Thus, 107 families constitute the sample for the present study. A power analysis indicated that with five predictors (the maximum for our direct effects and mediation hypothesis tests) in a multiple regression analysis, a sample of 70 participants would be sufficient to detect a small to medium effect ($d = .20$), with power = .80.

The mean age was 8.5 ($SD = 1.2$) for children, 34.0 ($SD = 6.8$) for mothers, and 35.8 ($SD = 8.2$) for partners. Eighty-two percent ($n = 88$) of couples were married, and 53% ($n = 57$) of partners were the biological father of the participating child. The sample was 44% White, 28% Black, 22% Hispanic, and 6% multi-ethnic or "other." Mothers had an average of 14 ($SD = 2.8$) years of education, and the median family income was US$3,547 per month ($M$ = US$4,096, SD = US$2,336). Forty-four percent of the children were female.

Procedures

All procedures were approved by the Institutional Review Board of the institution where the research was conducted. Mothers provided informed consent and children provided verbal assent prior to participation. Mothers and

children were interviewed in separate rooms at our research offices. The study measures were read aloud to the participants. Interviewers engaged the children in rapport-building games before beginning the interviews and took play breaks as needed to maintain rapport. Debriefing included assessment of the participants' levels of emotional distress and concerns about family conflict that might emerge as a consequence of participation, and mothers were provided with a list of agencies offering family services. Families received US$100 for participating in the 3.5-hr interview.

Measures

Physical IPV. Mothers completed the physical assault subscale of the Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996), using a modified response scale. Specifically, mothers reported how often she and her partner had engaged in each of 12 acts of physical IPV in the past 6 months on a 10-point scale (0 = *not in the past 6 months*, 1 = *once*, 2 = *two to three times*, 3 = *four to five times*, 4 = *once a month*, 5 = *two to three times a month*, 6 = *one to two times a week*, 7 = *three to four times a week*, 8 = *five to six times a week*, 9 = *every day*). Item scores were summed to form the score for the frequency of physical IPV for mothers' reports of their own IPV ($\alpha = .48$) and their partner's IPV ($\alpha = .75$; scores could range from 0 to 108 for each person). The correlation between mothers' reports of their own and partner's IPV was .17, n.s. These two scores were summed to index the aggregate physical IPV in the relationship ($\alpha = .69$). Scores on the CTS2 based on the modified response scale have been found to correlate with child reports of parental IPV (McDonald & Grych, 2006; McDonald, Jouriles, Rosenfield, & Leahy, 2012).

Coercive control. In the absence of a standard approach for assessing coercive control pertaining to IPV (Langhinrichsen-Rohling et al., 2012), we developed one for this study. Our interest was in assessing whether the physical IPV was motivated by coercive control, rather than in assessing coercive control broadly or independently of physical IPV, and our procedure followed from the work of Ehrensaft and colleagues (1999). Specifically, if physical IPV was reported to have occurred in the past 6 months, we asked mothers to indicate "when IPV has happened" how true each of three reasons were for its occurrence: (a) to control you/him or to make sure you/he did what he/you wanted, (b) because he/you wanted to put you/him in your/his place, and (c) because he/you wanted to show you/him who's boss. These motives are experienced as controlling and negative by men as well as women (Ehrensaft et al., 1999). Mothers answered the three items for their partner's IPV if they reported that

he had engaged in one or more acts of physical IPV, and they answered the three items for their own IPV if they reported themselves to have engaged in one or more acts of physical IPV. Each item was rated on a 3-point scale (0 = *not at all true*, 1 = *somewhat or sometimes true*, 2 = *very true*; thus, each person's score could range from 0 to 6). If a mother or partner was reported *not* to have engaged in any act of physical IPV, the measure for the nonviolent person was not administered and the score for that person was set to zero (i.e., there was no IPV, thus no basis for coding IPV-related coercive control). The correlation between mothers' reports of their own and partner's coercive control was .15, n.s. For our primary analyses, mothers' coercive control, $\alpha = .62$, and partners' coercive control, $\alpha = .84$, were summed to index the aggregate level of coercive control in the relationship, $\alpha = .68$.

Children's threat perceptions. The threat subscale of the Children's Perceptions of Interparental Conflict Scale for younger children (CPIC-Y; Grych, 2000) was used to assess children's appraisals of threat in relation to interparental conflict. The threat scale includes 12 items that children rate on a 2-point scale (0 = *false*, 1 = *true*). A sample item is as follows: *When my parents argue I'm afraid they will yell at me too*. In the present sample, $\alpha = .74$. The threat scale has been shown to correlate with the frequency of IPV and with child adjustment problems (McDonald & Grych, 2006).

Children's internalizing and externalizing problems. Mothers completed the externalizing and internalizing scales of the Child Behavior Checklist (CBCL; Achenbach, 1991); *T*-scores were used in analyses. The CBCL is a widely used measure of child adjustment problems, with well-established psychometric properties. Children reported on their own externalizing problems on the Children's Disruptive Behavior Scale (CDBS; McDonald & Jouriles, 1999), a 9-item scale with a 3-point response format (0 = *never*, 1 = *sometimes*, 2 = *often*). A sample item is *Do other people think that you don't do what you are told or don't follow the rules?* In the present sample, $\alpha = .83$, and the CDBS correlates with the CBCL externalizing scale (McDonald & Grych, 2006; Skopp, McDonald, Jouriles, & Rosenfield, 2007), attesting to its validity. Children also completed the Child Depression Inventory (CDI; Kovacs & Beck, 1983). The CDI consists of 27 items followed by three statements (e.g., 0 = *I am sad once in a while*, 1 = *I am sad many times*, 2 = *I am sad all the time*), and children are asked to choose the statement that best describes their feelings during the previous 2 weeks. Item scores are summed to create a total score; higher scores reflect greater symptomatology. In the present sample, $\alpha = .79$. The CDI has adequate internal consistency, test–retest reliability, and concurrent validity with other measures of child emotional functioning (Kovacs & Beck, 1983).

Table 1. Means, Standard Deviations, and Correlations Among Study Variables (n = 107).

Variable	1	2	3	4	5	6	7	*M* (*SD*)
1. Interparent psychological abuse	—							27.2 (14.3)
2. Interparent physical IPV	.49***	—						3.9 (3.8)
3. Interparent coercive control	.47***	.45***	—					1.5 (2.2)
4. Child threat perceptions	.09	.12	.16	—				3.5 (1.9)
5. Mother-report externalizing (CBCL)	.10	−.00	.22*	.15	—			58.5 (9.1)
6. Mother-report internalizing (CBCL)	.05	−.09	.16	−.11	.57***	—		58.1 (8.4)
7. Child-report externalizing (CDBS)	−.05	−.03	.24*	.31**	.30**	.02	—	8.3 (5.9)
8. Child-report internalizing (CDI)	−.01	−.05	.23*	.30**	.29**	.14	.68***	8.1 (5.6)

Note. IPV = intimate partner violence; CBCL = Child Behavior Checklist; CDBS = Children's Disruptive Behavior Scale; CDI = Child Depression Inventory.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Psychological abuse. Mothers completed a shortened version of the Index of Psychological Abuse (IPA; Sullivan, Parisian, & Davidson, 1991). On the IPA, mothers indicated on a 4-point scale (0 = *never* to 3 = *often*) how often she and her partner had each engaged in 24 acts of psychological aggression during the past 6 months. Sample acts include calling one's partner names, ridiculing or humiliating a partner, and trying to control a partner's activities. In the current sample, $\alpha = .80$ for mothers' psychological abuse, and $\alpha = .87$ for mothers' reports of partners' psychological abuse. The correlation between mothers' reports of their own and their partner's psychological abuse was .46, $p < 001$. We summed mothers' and partners' scores to index the aggregate level of psychological abuse in the relationship ($\alpha = .88$). This scale correlates with variables theoretically linked to psychological maltreatment (Sullivan, Nguyen, Allen, Bybee, & Juras, 2000).

Results

Descriptive Information on IPV and Coercive Control

Means, standard deviations, and correlations among the study variables are presented in Table 1. The mean frequency of couples' physical IPV was

$M = 3.9$, $SD = 3.8$ (just under once a month). Of the 107 couples, there were 41 in which only the mother was reported to have committed a physically violent act, 15 in which only the partner was reported to have done so, and 51 in which both were reported to have done so. As expected, the distribution for the frequency of physical IPV was skewed toward the lower end, with 67% of the participants reporting between 1 and 3 acts in the previous 6 months.

Physical IPV was reported to have been motivated by coercive control in 57% ($n = 61$) of the couples. This rate is somewhat higher than has been found in a nationally representative sample (Black et al., 2011), but this is not surprising given that our sample was recruited on the basis of having recently experienced physical IPV. Of the 61 couples who engaged in coercive-controlling physical IPV, there were 33 in which only the mother's IPV was reported to be coercive, 18 in which only the partner's IPV was reported to be coercive, and 10 in which both partners' IPV was reported to be coercive. Our aggregate score for coercive control was positively associated with the aggregate frequency of physical IPV, $r = .45$, $p < .001$, and with the aggregate psychological abuse, $r = .47$, $p < .001$, providing some evidence of the validity of the coercive control measure. In addition, the aggregate score of coercive control was positively associated with three of the four measures of child adjustment problems: mothers' reports of child externalizing problems, $r = .22$, $p = .03$, and child self-reports of externalizing problems, $r = .24$, $p = .01$, and child self-reports of internalizing problems, $r = .23$, $p = .02$.

Before evaluating our hypotheses, we examined the need to control for demographic variables in our analyses. We regressed each child adjustment variable (our dependent variables) onto family income, mothers' age, education, and ethnicity, child age and sex, and partners' biological relationship to the child. Mothers' education was associated with mothers' reports of child externalizing and internalizing problems, over and above the other demographic variables. Thus, we included it as a control variable in our analyses. None of the other demographic variables were related to the child adjustment measures; thus, they were not included in subsequent analyses.

Hypothesis 1: Relations of Coercive Control to Child Adjustment Problems

We hypothesized that coercive control would be positively associated with child externalizing and internalizing problems, even after accounting for the frequency of physical IPV and psychological abuse. To test this, we conducted a series of multiple regression analyses, regressing each child adjustment measure onto coercive control, and including the frequency of physical

Table 2. Relations of Coercive Control to Child Adjustment, Controlling for Parental Physical IPV and Psychological Abuse.

Variable	β	*B* (*SE*)	Semi-partial ω^2
Child report of externalizing (CDBS)[a]			
Mothers' education	−.05	−0.11 (.20)	.00
Psychological abuse	−.16	−0.07 (.05)	.00
Frequency of physical IPV	−.12	−0.18. (.18)	.00
Coercive control	.38**	1.04 (.31)	.10
Child report of internalizing (CDI)[b]			
Mothers' education	.07	0.15 (.19)	.01
Psychological abuse	−.10	−0.04 (.05)	.00
Frequency of physical IPV	−.15	−0.22 (.17)	.00
Coercive control	.34**	0.88 (.29)	.08
Mother report of externalizing (CBCL)[c]			
Mothers' education	.22*	0.73 (.31)	.06
Psychological abuse	.03	0.02 (.07)	.01
Frequency of physical IPV	−.12	−0.28 (.27)	.00
Coercive control	.24*	0.99 (.47)	.05
Mother report of internalizing (CBCL)[d]			
Mothers' education	.22*	0.68 (.28)	.06
Psychological abuse	.02	0.01 (.07)	.00
Frequency of physical IPV	−.20	−0.44 (.25)	.01
Coercive control	.22*	0.88 (.43)	.04

Note. IPV = intimate partner violence; CDBS = Children's Disruptive Behavior Scale; CDI = Child Depression Inventory; CBCL = Child Behavior Checklist.
[a]$F(4, 102) = 2.97$, $p = .02$, $R^2 = .10$.
[b]$F(4, 102) = 2.65$, $p = .04$, $R^2 = .09$.
[c]$F(4, 102) = 3.16$, $p = .02$, $R^2 = .11$.
[d]$F(4, 102) = 3.24$, $p = .02$, $R^2 = .11$.
*$p \leq .05$. **$p \leq .01$.

IPV, interparental psychological abuse, and mothers' education as control variables. Results indicated that coercive control was related to each of the measures of child adjustment problems (see Table 2).

Hypothesis 2: Children's Threat Perceptions as a Potential Mediator

We conducted path analyses to examine whether child threat perceptions might help account for the association of coercive control with the measures of adjustment problems. The frequency of physical IPV, interparental

psychological abuse, and mothers' education were again included as control variables in the models. To estimate the "*a*" path coefficient (predictor to hypothesized mediator), we regressed threat onto coercive control and the control variables. To estimate the "*b*" path coefficient (hypothesized mediator to outcome variables) for each measure of child adjustment problems, we regressed the measure of child problems onto coercive control, child threat perceptions, and the control variables. We conducted a distribution of products test to evaluate the statistical significance of the indirect effect of child threat perceptions in the link between coercive control and the measures of child adjustment problems, using RMediation (Tofighi & MacKinnon, 2011) to calculate the asymmetric 95% confidence interval (CI) for the $a \times b$ effect (MacKinnon, 2008; MacKinnon, Fritz, Williams, & Lockwood, 2007). This test has more power and more appropriate Type 1 error rates than most approaches to testing mediation (e.g., Baron & Kenny, 1986). The confidence interval for the test for each measure of adjustment problems included zero; thus, there was no evidence for indirect effects.

Unpacking mothers' and partners' aggression. We explored whether the associations involving coercive control and child adjustment problems might be more attributable to one or the other parent's coercive control. Examining the bivariate correlations for mothers' and partners' coercive control separately, mothers' coercive control was associated with their reports of child externalizing problems, $r = .24$, $p = .01$, and internalizing problems, $r = .20$, $p = .03$, and with child self-reports of externalizing problems, $r = .30$, $p = .002$, but not internalizing problems, $r = .18$, $p = .07$. Partners' coercive control was not associated with any of the indices of child problems: mothers' reports of externalizing problems, $r = .11$, $p = .26$, and internalizing problems, $r = .07$, $p = .50$; child self-reports of externalizing problems, $r = .10$, $p = .30$, and internalizing problems, $r = .18$, $p = .07$. Comparisons of the correlations (Fisher's *z* transformations of correlations followed by *z*-tests) indicated that mothers' and partners' coercive control did not differ from one another in the magnitude of their relations to child problems.

Discussion

The concept of coercive control has garnered considerable attention in the literature on adult physical IPV, but it has received virtually no attention in the literature on the link between physical IPV and child adjustment problems. The results of this study indicate that coercive control in the context of physical IPV is positively associated with both mothers' and children's reports of children's externalizing and internalizing problems. These associations

emerge even after accounting for the frequency of parental physical IPV and psychological abuse. These findings suggest that processes underlying the physical violence, and not just the violence itself, may be important for understanding child adjustment within the context of parental physical IPV. Specifically, the hostile, threatening, and controlling processes at the core of coercive control appear to be important for understanding how parents' physical IPV affects children's adjustment problems.

Some scholars have argued that IPV cannot really be understood without acknowledging distinctions among different types of violent relationships, violent individuals, and the motives of the perpetrators (e.g., Holtzworth-Munroe & Stuart, 1994; Johnson & Ferraro, 2000). Our findings suggest that the same might be argued for understanding how children are affected by IPV. In other words, simple comparisons of children exposed to IPV, versus those who are not exposed, ignore and obscure the potential influences of the variability in IPV on the witnessing children (Holt, Buckley, & Whelan, 2008; Jouriles et al., 1998). Different dynamics underlying the IPV (e.g., IPV motivated by coercive control versus IPV that occurs for other reasons) may convey very different messages to a child, with some contributing to short- and long-term adjustment difficulties. This may be one reason why some studies fail to replicate the otherwise rather consistent findings of relations between IPV and child adjustment problems (see Evans et al., 2008; Kitzmann et al., 2003; Wolfe et al., 2003, for reviews). An important conclusion to be drawn from this research is that a more nuanced measurement of IPV—one that considers different relationship dynamics, such as coercive control—may yield a clearer understanding of how and when IPV relates to children's adjustment problems.

It is not clear from our study exactly why coercive control related to child adjustment problems. We had hypothesized that child threat perceptions might help explain the relations, but our results were not consistent with this hypothesis. Although we are reluctant to conclude that child threat perceptions do not play a role at all in the documented associations between coercive control and child adjustment problems, the methodological explanations ordinarily invoked to help explain null results (e.g., inadequate measurement, insufficient power) do not seem to hold in this study. Specifically, our measure of child threat perceptions correlated positively with child adjustment problems, suggesting that the measure of threat perceptions was appropriate. In addition, the study was sufficiently powered to detect small-to-medium effects (detailed in the "Methods" section). Perhaps broader variables that incorporate child threat perceptions, such as children's emotional security in the interparental relationship (Davies & Cummings, 1994), might instead explain these links. Another possibility is that men and women who engage

in coercive physical aggression within their intimate relationships also do so in their relationships with their children, and women perhaps do this to a greater extent than men, which might explain some of the stronger associations that involved mothers' coercive control. That is, women may use coercion to gain their child's compliance, and manipulate, be disrespectful of, or undermine their child's autonomy.

This study possesses several methodological strengths, including the collection of data on child adjustment problems from mothers as well as children, and the conservative analytic plan, which demonstrated contributions for coercive control after accounting for interparental psychological abuse and the frequency of physical IPV. However, several limitations also need to be considered. Data on the primary variable of interest, coercive control, were collected using mothers' reports on a brief measure designed for this study. In addition, whereas mothers' provided reports on their own motives for IPV, they reported their *perceptions* of their partners' motives. The extent to which these perceptions align with the partners' actual motives for IPV is unknown. Obtaining reports of motives (and perceptions of the others' motives) from both partners' would be necessary to address this validity issue. Although the measure of coercive control was internally consistent, and it correlated in the expected direction with other established measures in this study (e.g., frequency of physical IPV, psychological abuse), additional data on coercive control from other sources (e.g., observations of couples' interactions, children's or partners' reports of coercive control) would also bolster confidence in our measurement of this phenomenon.

Another limitation was the cross-sectional, correlational design of this research, which constrains conclusions regarding the direction of effects and the reasons for the documented associations. Even though we accounted for the frequency of physical IPV and psychological abuse in our analyses, it is possible that other variables (e.g., child maltreatment, parental discipline styles) might partially explain the observed associations. It is also not clear how well our findings generalize to other samples, such as same-sex couples with children, families in which the mother figure is not the biological mother of the child, or to help-seeking or clinical samples of families.

In conclusion, the interpersonal dynamic of coercive control appears to contribute to our understanding of child adjustment problems within the context of physical IPV. This knowledge allows for a more sensitive determination of risk among children in families marked by physical IPV. Researchers can build upon our findings by replicating them and identifying the processes that account for the relation between coercive control and child adjustment problems.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the National Institutes of Health R01 MH062064.

References

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4–18 and 1991 profile*. Burlington: Department of Psychiatry, University of Vermont.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Bascoe, S. M., Davies, P. T., Sturge-Apple, M. L., & Cummings, E. (2009). Children's representations of family relationships, peer information processing, and school adjustment. *Developmental Psychology*, *45*, 1740-1751. doi:10.1037/a0016688

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., . . . Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Davies, P. T., & Cummings, E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin*, *116*, 387-411.

Ehrensaft, M. K., Langhinrichsen-Rohling, J., Heyman, R. E., O'Leary, K. D., & Lawrence, E. (1999). Feeling controlled in marriage: A phenomenon specific to physically aggressive couples? *Journal of Family Psychology*, *13*, 20-32. doi:10.1037//0893-3200.13.1.20

Evans, S. E., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior*, *13*, 131-140. doi:10.1016/j.avb.2008.02.005

Felson, R. B., & Outlaw, M. C. (2007). The control motive and marital violence. *Violence and Victims*, *22*, 387-407.

Finkelhor, D., Turner, H. A., Ormrod, R. K., Hamby, S. L., & Kracke, K. (2009). *Children's exposure to violence: A Comprehensive National Survey* (Juvenile Justice Bulletin, pp. 1-11). Washington, DC: U.S. Department of Justice.

Fosco, G. M., DeBoard, R. L., & Grych, J. H. (2007). Making sense of family violence: Implications of children's appraisals of interparental aggression for their short- and long-term functioning. *European Psychologist*, *12*, 6-16. doi:10.1027/1016-9040.12.1.6

Graham-Kevan, N., & Archer, J. (2003). Intimate terrorism and common couple violence: A test of Johnson's predictions in four British samples. *Journal of Interpersonal Violence*, *18*, 1247-1270. doi:10.1177/0886260503256656

Gray-Little, B., & Burks, N. (1983). Power and satisfaction in marriage: A review and critique. *Psychological Bulletin*, *93*, 513-538. doi:10.1037//0033-2909.93.3.513

Grych, J. H. (2000). *The Young Children's Perception of Interparental Conflict Scales*. Unpublished manuscript.

Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive contextual framework. *Psychological Bulletin*, *108*, 267-290.

Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, *32*, 797-810. doi:10.1016/j.chiabu.2008.02.004

Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, *116*, 476-497. doi:10.1037/0033-2909.116.3.476

Johnson, M. P. (1995). Intimate terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and Family*, *57*, 283-294.

Johnson, M. P., & Ferraro, K. J. (2000). Research on domestic violence in the 1990s: Making distinctions. *Journal of Marriage and Family*, *62*, 948-963.

Jouriles, E. N., McDonald, R., Norwood, W. D., Ware, H. S., Spiller, L. C., & Swank, P. R. (1998). Knives, guns, and interparent violence: Relations with child behavior problems. *Journal of Family Psychology*, *12*, 178-194.

Jouriles, E. N., Norwood, W. D., McDonald, R., Vincent, J. P., & Mahoney, A. (1996). Physical violence and other forms of marital aggression: Links with children's behavior problems. *Journal of Family Psychology*, *10*, 223-234. doi:10.1037/0893-3200.10.2.223

Kelly, J. B., & Johnson, M. P. (2008). Differentiation among types of intimate partner violence: Research update and implications for interventions. *Family Court Review*, *46*, 476-499. doi:10.1111/j.1744-1617.2008.00215.x

Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *71*, 339-352. doi:10.1037/0022-006X.71.2.339

Kovacs, M., & Beck, A. (1983). *The children's depression inventory: A self-rating depression scale for school-aged youngsters*. Unpublished manuscript, Western Psychiatric Institute and Clinic, Pittsburgh, PA.

Langhinrichsen-Rohling, J., McCullars, A., & Misra, T. A. (2012). Motivations for men and women's intimate partner violence perpetration: A comprehensive review. *Partner Abuse*, *3*, 429-468. doi:10.1891/1946-6560.3.4.429

MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. New York, NY: Taylor & Francis.

MacKinnon, D. P., Fritz, M. S., Williams, J., & Lockwood, C. M. (2007). Distribution of the product confidence limits for the indirect effect: Program PRODLIN. *Behavior Research Methods*, *39*, 384-389. doi:10.3758/BF03193007

McDonald, R., & Grych, J. H. (2006). Young children's appraisals of interparental conflict: Measurement and links with adjustment problems. *Journal of Family Psychology*, *20*, 88-99. doi:10.1037/0893-3200.20.1.88

McDonald, R., & Jouriles, E. N. (1999). *The Children's Disruptive Behavior Scale*. Unpublished measure.

McDonald, R., Jouriles, E. N., Ramisetty-Mikler, S., Caetano, R., & Green, C. E. (2006). Estimating the number of American children living in partner-violent families. *Journal of Family Psychology*, *20*, 137-142. doi:10.1037/0893-3200.20.1.137

McDonald, R., Jouriles, E. N., Rosenfield, D., & Leahy, M. M. (2012). Children's questions about interparent conflict and violence: What's a mother to say? *Journal of Family Psychology*, *26*, 95-104. doi:10.1037/a0026122

McDonald, R., Jouriles, E. N., Tart, C. D., & Minze, L. C. (2009). Children's adjustment problems in families characterized by men's severe violence toward women: Does other family violence matter? *Child Abuse & Neglect*, *33*, 94-101. doi:10.1016/j.chiabu.2008.03.005

Rhoades, K. A. (2008). Children's responses to interparental conflict: A meta-analysis of their associations with child adjustment. *Child Development*, *79*, 1942-1956. doi:10.1111/j.1467-8624.2008.01235.x

Skopp, N. A., McDonald, R., Jouriles, E. N., & Rosenfield, D. (2007). Partner aggression and children's externalizing problems: Maternal and partner warmth as protective factors. *Journal of Family Psychology*, *21*, 459-467. doi:10.1037/0893-3200.21.3.459

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, *17*, 283-316. doi:10.1177/019251396017003001

Sullivan, C. M., Nguyen, H., Allen, N., Bybee, D., & Juras, J. (2000). Beyond searching for deficits: Evidence that physically and emotionally abused women are nurturing parents. *Journal of Emotional Abuse*, *2*, 51-71.

Sullivan, C. M., Parisian, J. A., & Davidson, W. S. (1991, August). *Index of Psychological Abuse: Development of a measure*. Paper presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Tofighi, D., & MacKinnon, D. P. (2011). RMediation: An R package for mediation analysis confidence intervals. *Behavior Research Methods*, *43*, 692-700. doi:10.3758/s13428-011-0076-x

Wolfe, D. A., Crooks, C. V., Lee, V., McIntyre-Smith, A., & Jaffe, P. G. (2003). The effects of children's exposure to domestic violence: A meta-analysis and critique. *Clinical Child and Family Psychology Review*, *6*, 171-187. doi:10.1023/A:1024910416164

Author Biographies

Ernest N. Jouriles, PhD, is professor and chair in the Department of Psychology at Southern Methodist University. His research focuses on teen dating violence and children's responses to interparent conflict and violence.

Renee McDonald, PhD, is a professor in the Department of Psychology at Southern Methodist University. Her research focuses on child adjustment problems in the context of family conflict and violence.