

HHS Public Access

Author manuscript *Fam Relat.* Author manuscript; available in PMC 2017 December 01.

Published in final edited form as: Fam Relat. 2016 December : 65(5): 647–660. doi:10.1111/fare.12221.

Intimate Partner Violence, Maternal Gatekeeping, and Child Conduct Problems

Bharathi J. Zvara, University of North Carolina at Chapel Hill

W. Roger Mills-Koonce, University of North Carolina at Greensboro

Martha Cox, and University of North Carolina at Chapel Hill

Family Life Project Key Contributors

Abstract

We examined the mediating role of parenting behavior on the relationship between intimate partner violence and child conduct problems, as well as the moderating role of maternal gatekeeping to these associations. The sample (N = 395) is from a longitudinal study of rural poverty in the eastern United States, exploring the ways in which child, family, and contextual factors shape child development over time. Study findings indicate that a father's harsh–intrusive parenting behavior may be a key mediating pathway linking intimate partner violence and child conduct problems. Study findings further provide evidence for problematic outcomes for children when mothers encourage fathers with high levels of harsh–intrusive parenting to interact with their children.

Keywords

Child conduct problems; intimate partner violence; maternal gatekeeping; paternal caregiving

Background

An estimated 15.5 million children in the United States live in homes characterized as having intimate partner violence (IPV; McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). Studying IPV in rural communities may be particularly important because women living in rural areas experience IPV at a higher rate and with greater severity than women living in urban areas (Peek-Asa et al., 2011). Additionally, the family stress model (Conger, Conger, & Martin, 2010) posits that economic disadvantage leads to economic

CB#7445, 421C Rosenau Hall, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7445 (zvara@email.unc.edu). The Family Life Project (FLP) Key Investigators include Lynne Vernon Feagans, University of North Carolina; Martha Cox, University of North Carolina; Clancy Blair, New York University; Peg Burchinal, University of North Carolina; Linda Burton, Duke University; Keith Crnic, Arizona State University; Ann Crouter, Pennsylvania State University; Patricia Garrett-Peters, University of North Carolina; Mark Greenberg, Pennsylvania State University; Stephanie Lanza, Pennsylvania State University; Roger Mills-Koonce, University of North Carolina at Greensboro; Emily Werner, Pennsylvania State University; and Michael Willoughby, University of North Carolina.

pressure, which induces feelings of frustration, anger, and emotional distress in caregivers. These feelings, in turn, contribute to conflict among family members, including conflict between parents. However, in contrast to empirical and theoretical evidence suggesting that rural, low-income women may be particularly vulnerable to IPV, rural areas tend to have fewer resources and services for helping victims of IPV (Grossman, Hinkley, Kawalski, & Margrave 2005; Tiefenthaler, Farmer, & Sambira, 2005).

Research has consistently linked IPV with problematic child outcomes, including behaviors associated with conduct problems such as difficulties managing emotions and acquiring selfregulatory skills (Cummings & Davies, 2010; Jaffee, Moffitt, Caspi, & Taylor, 2003; Raver, 2004). Despite robust findings linking IPV and children's behavioral functioning, outcomes for children from violent homes are varied (Hughes & Luke, 1998). Because IPV is linked to more hostile parenting behavior (Gustafsson & Cox, 2012; Huth-Bocks & Hughes, 2008), and perhaps even more so to fathers' hostile parenting (Harold, Elam, Lewis, Rice, & Thapar, 2012), one explanation for the heterogeneity in outcomes may be that in some home environments with violence between adults, mothers may play a regulatory role by limiting the time fathers spend with their children, thereby limiting their direct influence on the children's development (Waller & Swisher, 2006). Although not well examined, it may be that mothers act as gatekeepers to moderate the relationship among family risk factors (e.g., IPV), parenting, and child conduct problems. Maternal gatekeeping, conceptualized as maternal attitudes, beliefs, and behaviors that restrict or encourage fathers' involvement with children, may be one mechanism by which mothers mitigate the effects of IPV on child adjustment. Understanding factors that may buffer the effects of IPV on children has important implications for policy and practice and the development of targeted intervention protocols.

Theoretical Frameworks

Different theoretical perspectives can explain the link between IPV, parenting behavior, and child conduct problems. According to emotional security theory (EST; Davies & Cummings, 1994), IPV directly affects child adjustment because witnessing it threatens children's sense of emotional security. A central component of EST posits that preserving a sense of security with their caregivers is a main goal for young children. Threats to that goal interfere with children's ability to regulate emotions, thereby leading to behavioral maladaptation, including conduct problems (Jenkins, 2002). EST also suggests that IPV has an indirect impact on children through parenting behaviors, such that being in a highly conflicted relationship depletes parents' abilities to respond appropriately to the demands of child rearing, resulting in more harsh parenting behaviors.

Further, family systems theory provides a framework to explore how the family system may influence child adjustment. According to family systems theory, each family relationship (e.g., the parent–child relationship) is embedded in a network of other family relationships (e.g., the spousal relationship), and a better understanding of the functioning and development of any given system in the family can be gained by considering the interdependence of these relationships and their mutual influence (Cowan & Cowan, 2006; Cox & Paley, 2003). As tested in the present study, this theory posits that a comprehensive

understanding of the link between IPV and subsequent maladaptive behavior in children requires the simultaneous consideration of other family relationships.

Intimate Partner Violence and Children's Conduct Problems

Conduct problems involve a broad range of disruptive and rule-breaking behaviors, including temper tantrums, frequent arguing with adults, lying, truancy, and more serious types of antisocial behavior, such as physical aggression, theft, property destruction, and alcohol and substance use (Hinshaw & Lee, 2003). National survey data reveal that 10% to 25% of children exhibit conduct problems (Snyder, 2001). Although not all children with early conduct problems develop more severe conduct disorders, the development of more serious psychopathology is often preceded by early conduct problems (Hinshaw & Lee, 2003).

Family factors such as maladaptive parenting behaviors are well-researched influences on the development of conduct problems (Huth-Bocks & Hughes, 2008; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). Several longitudinal studies link low socioeconomic status (e.g., low family income, low parental education) to the development of conduct problems (Murray & Farrington, 2010), and other research has found that parenting behaviors are among the most robust predictors of child conduct problems (Tanner-Smith, Wilson, & Lipsey 2013). As a group, parents of children with conduct problems are more negative, more harsh and intrusive, and more inconsistent in their child-rearing behaviors; they also use more aggressive and violent discipline (Pardini, Waller, & Hawes, 2015; Tolan, Dodge, & Rutter, 2013). Although a substantial amount of literature has amassed on the role of parenting and other family factors that may be related to the development of conduct problems (Huth-Bocks & Hughes, 2007; Pardini et al., 2015; Shaw et al., 2003), there are still unanswered questions regarding these linkages. For example, the development of conduct problems in certain low-frequency but high-risk family environments, such as those with IPV, has not been sufficiently examined (Hughes & Luke, 1998).

The Mediating Role of Parenting Behavior

Parenting plays a key role in child development and has accordingly been hypothesized to be one pathway linking IPV to conduct problems in children. Specifically, researchers have posited that the hostility, stress, and negative mood from the adult relationship affect the parent–child relationship (Davies, Sturge-Apple, Woitach, & Cummings, 2009; Erel & Burman, 1995), thereby influencing child behavioral adjustment. The primary assumption of this spillover hypothesis is that anger, frustration, and distress associated with IPV disrupt parental abilities to be warm and attentive caregivers. A substantial amount of research regarding the relationship between IPV and parenting behaviors supports the spillover process, with findings emphasizing that parents who experience IPV exhibit more harsh and hostile parenting behaviors and less attention and warmth toward children than do their counterparts who do not experience IPV (Erel & Burman, 1995).

In recent years, there has been burgeoning data highlighting both the positive and negative influence of paternal parenting on children's development. Although limited data are available on men parenting in the context of IPV, evidence suggests that men prone to

aggressive behavior with an intimate partner are more likely to demonstrate hostile–coercive parenting behavior toward their children (Stover & Morgos, 2013). Further, among children who have violent fathers, those children who reside in the same household with a violent father have a higher risk of developing behavior problems (Jaffee et al., 2003). Given research findings linking IPV to parenting behavior (Gustafsson & Cox, 2012), and linking parenting behavior to child conduct problems (Pardini et al., 2015; Tolan et al., 2013), it is important to examine the associations between IPV, parenting, and child conduct problems in intact families.

The Moderating Role of Maternal Gatekeeping

Consistent with family systems theory (Cox & Paley, 2003), which emphasizes the interdependence of family members and their relationships, some researchers have suggested that mothers play an important role in shaping fathers' parenting behavior through maternal gatekeeping (Allen & Hawkins, 1999; Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008). Maternal gatekeeping is used in the literature primarily as a concept to identify mothers' efforts to shape fathers' involvement with their children through encouraging or discouraging contact between father and child. The use of gatekeeping by mothers as a means of regulating access to their children may have particular importance in the context of IPV; if a mother feels that her child's well-being is in jeopardy, she may be less likely to "open the gate" to greater contact between the father and child.

Mothers may engage in gatekeeping for a variety of reasons, including a pessimistic assessment of the father's competence in child care (Schoppe-Sullivan et al., 2008), or the restriction or regulation of access to their children in the context of IPV (Roy & Dyson, 2005). Roy and Dyson (2005) asserted that mothers' assessment of fathering behavior can be expressed directly through maternal gatekeeping behavior, as either encouragement or discouragement of men's time with their children. Because a gatekeeper can both close and open a gate, gatekeeping is conceptualized in this study as a proactive behavior whereby mothers use encouragement to increase father–child interactions and use discouragement to decrease father–child interactions (e.g., when they perceive less paternal competence in the face of violent behavior).

The Present Study

To the best of our knowledge, this is the first study to examine the moderating role of maternal gatekeeping in the association between paternal harsh–intrusive parenting behavior and child conduct problems in the context of IPV, and among the first to longitudinally examine maternal and paternal parenting simultaneously. Although prior research has linked IPV to both maternal harsh–intrusive parenting behavior (Gustafsson & Cox, 2012) and child conduct problems (Huth-Bocks & Hughes, 2008), less research has examined the particular effects of paternal parenting behavior on child conduct problems. Moreover, although Harold et al. (2012) examined the independent effects of fathers' parenting on child antisocial behavior, they used self-report measures of parenting behavior.

The present study uses parenting variables derived from observational methods, which allow for independent assessment of parenting behavior while interacting with one's child.

Parenting observations offer the added advantage of focusing on overt behavior, which may provide less interpretational latitude than self-report items (Gardner, 2000). On the basis of extant literature linking individual- and family-level factors to child conduct problems (Cummings & Davies, 2010; Jaffee et al., 2003), and guided by family systems theory highlighting the need to consider the interdependence of multiple family relationships in child development (Cox & Paley, 2003), we hypothesize that there will be (a) a positive association between early exposure to IPV and child conduct problems in middle childhood; (b) that this association will be mediated, in part, by parental harsh–intrusive parenting for mothers and fathers; and (c) that the association between a father's harsh–intrusive parenting and child conduct problems will be moderated by maternal gatekeeping, such that low levels of maternal encouragement of father–child activities will be associated with lower correlation between paternal harsh–intrusive parenting and child conduct problems.

Method

Participants

The subsample for the proposed study was drawn from the Family Life Project (FLP). The FLP is a longitudinal, multimethod, multiple-respondent study of rural poverty that explores the ways in which child, family, and contextual factors shape child development over time (Vernon-Feagans & Cox, 2013). Recruitment occurred in six rural counties in Pennsylvania (n = 519) and North Carolina (n = 773) with an oversampling of low-income families in both locations, and of African American participants in North Carolina. A total of 1,292 families were recruited over 12 months from hospitals at the birth of the target children and completed the first home visit 2 months after the target child was born. For the present study, we used data collected when the child was 6, 15, 24, and 60 months of age as well as in the first grade.

Our subsample consisted of families in which the target child lived with both biological parents (regardless of marital status) through all assessments from age 2 months to the 60-month assessment (n = 395). Mothers with transient or nonresidential partners were not included in these analyses because of the concern that violence in these types of relationships would differentially affect children's behavioral functioning when compared to family violence occurring in coresidential relationships, and because observational data were not obtained for fathers and children when fathers were not coresidential. The sample comprised 78.9% European American couples and 21.1% African American couples, 50.8% male children, and 71.0% of couples were married. Only 15 families identified as Latino or Hispanic in the larger FLP sample, and four of those families are included in our subsample, representing 1% of the sample. Mean age at the 6-month data collection point was 27.6 years (SD = 5.9) for women and 32.2 years (SD = 7.3) for men. The mean household income-to-needs ratio was 2.3 (SD = 1.9). A high school diploma or GED equivalent had been earned by 85% of women and 79% of men.

Procedures

During the home visits, two research assistants conducted interviews with mothers and fathers and administered questionnaires, conducted child assessments, and video recorded

interactions between children and adults. At the 60-month visit, the mother, father, and target child were asked to participate in two developmentally appropriate activities for the child that were filmed for later coding of parenting behavior. Mothers and fathers were recorded digitally in separate interactions with their child.

Measures

Intimate partner violence-To assess IPV, the Conflict Tactics Scale-Couple Form Revised (CTS-R; Straus, Gelles, & Smith, 1990) was administered to all mothers and their partners when the target child was 6, 15, and 24 months of age. In an effort to more accurately capture father-perpetrated violence in this sample across the three assessments, both mothers' and fathers' reports of father-perpetrated violence were used because women may be more reliable reporters of physical aggression than men (Straus & Sweet, 1992). Scores on the nine-item physical violence subscale, which captures incidences of physical violence, were used to assess violence in the romantic relationship at each of the three time points. To capture the chronic nature of the IPV occurring in these households, respondents were asked to rate on a 7-point scale how often in the previous 12 months they had engaged in specific behaviors; response options were never (0), once (1), twice (2), 3-5 times (3), 6-10 times (4), 11-20 times (5), and more than 20 times (6). The severity of the IPV was indexed following the direction of Straus and Gelles (1986). A couple was designated as having perpetrated minor violence if either partner reported that the male "threw something," "pushed, grabbed, or shoved," or "slapped" in the past 12 months. A couple was designated as having perpetrated severe violence if either partner reported that the male had "kicked, bit, or hit with a fist," "hit or tried to hit with something," "beat up," "choked," "threatened with a knife or gun," or "used a knife or gun" in the previous 12 months. We summed across mothers' and fathers' reports of the chronicity and severity of IPV across the three assessments to create a latent variable for total IPV in the home.

Although prior research suggests that only male-perpetrated or only female-perpetrated violence is rare in community samples of heterosexual couples (Archer, 2000; Caetano, Vaeth, & Ramisetty-Mikler, 2008), in the present study we focused on father violence to better understand how maternal gatekeeping may moderate the association between violence and child conduct problems. Cronbach's alphas for the 18-item total scores for physical violence ranged from .83 to .87 in our sample for the three time points.

Observed parenting behaviors—When the target child was 60 months old, motherchild interactions were video recorded and subsequently coded to assess the levels of mothers' intrusiveness and negative regard while interacting with the child (NICHD Early Child Care Research Network, 1999). Several published reports have effectively used maternal–child interaction data from the Family Life Project to predict child outcomes (see, e.g., Zvara, Mills-Koonce, Heilbron, Clincy, & Cox, 2015). Mother–child dyads were presented with two developmentally appropriate activities of increasing difficulty. Mothers were told that this was an activity for the child to complete but that they could provide any assistance they deemed necessary. The tasks included (a) building a replica of a tower using similar blocks of different shapes and sizes, and (b) a card game in which the mother and child competed against each other in an effort to win the most cards in the deck. These

activities were selected, in part, because they invariably provide opportunities to observe expressions of affect from the mother and the child as well as the child's emotional regulation in a potentially exciting or frustrating situation. The combined tasks lasted approximately 15 minutes. Both frequency and intensity of behaviors directed toward the child were considered in the coding procedures.

A composite score for harsh-intrusive parenting (the mean of intrusiveness and negative regard) was used in these analyses. Mothers given a score of 7 (the highest possible score) on the intrusiveness subscale consistently displayed behaviors that showed a lack of respect for the child as an individual. These mothers frequently interfered with the child's needs, desires, and interests, and they denied almost all of the child's attempts at autonomy, often persisting with their own desires or agenda despite strong child defensive behavior (e.g., crying, withdrawing, verbalizing that they would like her to stop). Examples of maternal intrusive behaviors include physical manipulation of the child's hands or body; denying the child the opportunity to select the toys or pieces to use, or to interact with the toys or complete the task him- or herself; and verbally directing the child at a pace and in a context that was not appropriate to the child's cues, as compared to mothers who did not impose directives on the child unless it was clear that the child needed direction. The negativeregard subscale captured the amount of negative and hostile behaviors that were directed toward the child during the activity. In contrast to mothers who did not demonstrate anger, frustration, or impatience toward their child, mothers high in negative regard exhibited behaviors that reflected disapproval through irritated or harsh comments or vocal tone, tense facial muscles or posture meant to communicate a threat or disapproval, threatening or punishing the child without explanation, or calling the child unflattering names.

Coders underwent training until acceptable reliability (intraclass correlation coefficient of greater than .80) was achieved and maintained for each coder on both scales. To assess reliability after formal coding began, a random selection of at least 20% of interactions was coded by all coders. Coders met biweekly to reconcile scoring discrepancies; the final scores that they arrived at by consensus were used in all analyses. Interrater reliability was greater than .80 across pairs of coders.

Observed paternal parenting behavior—Similar to the mother–child interactions described already, father–child interactions were video recorded while the dyad engaged in two structured tasks during the 60-month home visit to assess parenting quality in the context of the father–child dyad. A number of published reports have effectively used these father–child interaction data from the Family Life Project to predict child outcomes (see, for example, Zvara et al., 2015). The first activity was to build a tower as high as the child could build using brightly colored blocks. The father was told that this was a task for the child to do but that he could help in any way that he thought was necessary. The second task, called "hot hands," required that both players hold their hands open in front of them, one with palms up and the other with palms down and hovering directly above the other player's hands, with the two players' hands barely touching each other. The player whose hands are on the bottom attempts to bring his or her hands over to slap the top or backsides of the opponent's hands. This must be done with sufficient speed, because the goal of the player whose hands are above with palms facing down is to pull his or her hand away and out of the

area where the hands overlap to avoid the slap. These activities provided a context for observing the father's support for the child in activities that could be fun and frustrating and provided an opportunity to observe expressions of affect from the father. As with observed mother–child parenting behavior, a composite score for harsh–intrusive paternal parenting (the mean of intrusiveness and negative regard) was used in these analyses. Interrater reliability was greater than .80 across pairs of coders.

Maternal gatekeeping behavior—Maternal encouragement of father involvement was assessed using a brief structured interview adapted from the Parental Gatekeeping Inventory (Van Egeren, 2003) that addresses the degree to which father involvement with the child is encouraged or discouraged by the mother. The scale consists of two items ("I want the child's father involved in his/her upbringing" and "I encourage the father to spend time alone with the child"), with a 6-point Likert-type response scale anchored by *strongly disagree* (0) and *strongly agree* (5). The two indicators were highly correlated in the present sample, (r = .69, p < .01). A total score was obtained by summing across the two items, with higher scores reflecting greater encouragement (i.e., maternal gate opening).

Child conduct problems—Child conduct problems were assessed using mother reports of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) during the first-grade data collection point. The SDQ is a 25-item screening questionnaire for completion by caregivers of children between 3 and 16 years of age. Only the five-item conduct problems subscale was used, which asks whether it is *not true* (0), *somewhat true* (1), or *certainly true* (2) that the target child: (a) often loses his or her temper, (b) is generally well behaved and usually does what adults request (reverse scored), (c) often fights with other children or bullies them, (d) is often argumentative with adults, and (e) can be spiteful to others. These items had a Cronbach's alpha of .74 in the present study.

Control variables—At each home visit, mothers were asked to report on a variety of household demographic variables including household income, race, child sex, and maternal education. Poverty status, education, ethnic minority status, and child sex have each been identified as important correlates of parenting (see Conger et al., 2010, for a review), and thus the family's income-to-needs ratio, maternal education, and the target child's race and sex were included as covariates in this model. Income-to-needs ratios were calculated at each assessment time point by dividing the total household income from all possible sources by the federally determined poverty threshold for the number of people living in the household for that year. Income-to-needs ratios above 1.0 indicate that a family is able to provide for basic needs, whereas values below 1.0 indicate that the family is living below the federal threshold for poverty status. Because income-to-needs ratios showed stability over time (r = .68, p < .01), the mean of the family's income-to-needs ratio from the 6-month through 60-month time points was used as a covariate in our analyses. In addition to each of these demographic variables, the data collection site (North Carolina vs. Pennsylvania) was used as a covariate during model parameterization to account for any possible differences in task administration across sites.

Data Analysis Plan

Data analysis was conducted in several steps. Preliminary analyses included examining intercorrelations of all study variables. Structural equation modeling (SEM) was used to test the proposed models (Schumacker & Lomax, 1996). Models were parameterized using the Mplus 6.0 software package (Muthén & Muthén, 1998–2010) and robust maximum likelihood estimation. Full information maximum likelihood (FIML) was used as the missing data technique (Arbuckle, 1996), using all available observations and providing unbiased estimation of model parameters in the presence of missing data. Model fit was examined using a number of fit indices, including the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), and the root mean squared error of approximation (RMSEA; Browne & Cudeck, 1993). CFI and TLI values above .90 and RMSEA values below .05 indicate excellent model fit.

This study was conceptualized to examine mediation followed by moderation effects. The first component of the model posits that IPV has both direct and indirect effects on child conduct problems, with indirect effects mediated through mothers' and fathers' harsh– intrusive parenting. The second component of the model posits that the impact of the father's harsh–intrusive parenting on child conduct problems is moderated by maternal gatekeeping (i.e., maternal encouragement of interaction between the father and the child). In the present study, maternal encouragement is proposed to affect the direction and strength of the relation between conduct problems and a father's harsh–intrusive parenting, such that the effect of a father's harsh–intrusive parenting on conduct problems varies by the level of maternal encouragement.

Results

Correlations among the study variables were largely as expected (see Table 1). Child conduct problems at Grade 1 were positively related to fathers' and mothers' harsh–intrusive parenting at 60 months (r= .20, p = .01) and (r= .29, p = .01), respectively, suggesting that higher levels of harsh–intrusive parenting for both mothers and fathers were associated with higher levels of child conduct problems. Child conduct problems were also positively related to the assessments of IPV at 6 months (r= .25, p= .01), 15 months (r= .24, p= .01), and 24 months (r= .16, p= .01), respectively, suggesting that higher levels of child conduct problems.

Hypothesis Testing

For the first part of the analysis, a structural equation model was estimated that simultaneously considered the associations among father-perpetrated IPV, both mother's and father's harsh–intrusive parenting, and child conduct problems while in first grade. We employed a median split to create the grouping variable for high and low maternal encouragement.

In Model 1, paths were estimated to include all covariates and subsequent predictors of child conduct problems. In this model, all paths between high and low maternal encouragement groups were allowed to vary, using the dichotomized variable "group." The model was a

good fit to the data, χ^2 (44, N = 395) = 65, CFI = .97, RMSEA = .03 (see Figure 1). IPV had a direct statistical effect on both child conduct problems ($\beta = .11, p < .01$) and maternal harsh-intrusive parenting ($\beta = .11, p = .03$), the latter of which was related to child conduct problems ($\beta = .04, p = .02$). Similarly, IPV had a direct statistical effect on paternal harshintrusive parenting ($\beta = .19, p < .01$), which was in turn related to child conduct problems (β = .08, p < .01). However, with fathers there was not a statistically significant indirect pathway from IPV to child conduct problems via paternal harsh-intrusive parenting. Finally, "group" statistically predicted child conduct problems ($\beta = .10, p = .04$).

Next, the same model as described for Model 1 was run again but with the data grouped according to the low and high maternal encouragement groups, which allowed the pathways within these groups to be examined more closely. Model 2 was a good fit to the data, $\chi 2$ (40, N = 395) = 70, CFI = .94, RMSEA = .04. The pathway from IPV to child conduct problems remained statistically significant in the high-encouragement (low-gatekeeping) group ($\beta = .$ 43, p = .04), but not in the low-encouragement (high-gatekeeping) group ($\beta = .04$, p = .10), suggesting a conditional indirect effect from IPV to conduct problems in the presence of gatekeeping (Preacher, Rucker, & Hayes, 2007). IPV had a statistical effect on both maternal ($\beta = .04$, p = .03) and paternal ($\beta = .27$, p < .01) harsh–intrusive parenting, the latter of which was in turn related to child conduct problems through paternal harsh–intrusive parenting ($\beta = .02$, p = .04). In the low-encouragement (high-gatekeeping) group, IPV was not related to paternal harsh–intrusive parenting ($\beta = .05$, p = .14), and neither mother's ($\beta = .04$, p = .15) nor father's ($\beta = .10$, p = .54) parenting was related to child conduct problems.

Following procedures outlined by Holmbeck (1997), a third model was estimated in which all paths between high and low maternal encouragement groups were allowed to vary. A chi-squared difference test revealed that constraining this path to 0 did not result in a statistical reduction to model fit, suggesting that a mother's encouragement of interactions with violent fathers was related to greater conduct problems.

Discussion

Despite the importance of understanding child development in challenging home environments, few studies have employed rigorous longitudinal tests to examine the predictive ability of maternal and paternal parenting behaviors on children's conduct problems in the context of intimate partner violence. Further, given that much of the extant research devoted to understanding the associations between IPV and child behavioral outcomes has relied on responses from a single reporter assessed at a single assessment time point, the present investigation extends previous studies by examining IPV reported by both parents across the first two years of the child's life (i.e., at 6, 15, and 24 months). In addition, this study is among the first to test the moderating role of mothers' encouragement of interaction between the father and child and how this gatekeeping behavior may be related to child conduct problems in the context of IPV.

The results of this study suggest that father-perpetrated IPV across the first two years of life among coresidential parents is associated with child conduct problems in first grade. More specifically, we found that beyond the association of maternal and paternal parenting and numerous covariates, there was a statistically significant, direct association between IPV and child conduct problems. Consistent with the principles of a developmental psychopathology approach to evaluating children's risk for conduct problems, these findings highlight the importance of understanding the roles of multiple family processes and the unfolding of pathways of children's development over time. Pathways between IPV and children's conduct problems were identified, including the mediating role of fathers' harsh–intrusive parenting and the moderating role of maternal gatekeeping (gate opening).

The findings support prior research suggesting that IPV in the early years of life may have immediate and long-term consequences for children's emotional development (Cummings & Davies, 2010). Exposure to IPV among parents is not only distressing and dysregulating for children; it also undermines their sense of safety and security in the family (Davies & Cummings, 1994). These security concerns, in turn, interfere with children's ability to cope effectively, thereby influencing children's conduct problems (Webster-Stratton & Hammond, 1999). In addition to this direct association, children experiencing harsh-intrusive parenting in the context of IPV may develop conduct problems as a result of perceived lack of security with caregivers and family instability (Cummings & Davies, 2010). Children of negative, controlling parents are not only denied structured opportunities to learn to regulate their emotions; displays of parental hostility can result in children becoming overly aroused, thereby undermining their ability to regulate their emotions (Eisenberg, Taylor, Widaman, & Spinrad, 2015). The behaviors that these parents engage in provides a model for poor emotional regulatory strategies, and these parents may serve as models of dysfunctional interpersonal relations by exhibiting hostile emotions and behaviors, a fact that has implications for the development of conduct problems (Eisenberg et al., 2015).

A novel component of the present study was the examination of the moderating role of maternal gatekeeping, conceptualized as maternal encouragement (gate opening), in associations between IPV, the father's harsh–intrusive parenting, and child conduct problems. Our findings reveal problematic outcomes for children when mothers encourage fathers with high levels of harsh–intrusive parenting to interact with their children. This may be especially relevant for children in violent homes with coresidential fathers. Jaffee et al. (2003) reported that the less time fathers lived with their children, the more conduct problems their children had, but only if the fathers engaged in low levels of antisocial behavior including violence. In contrast, living with fathers engaged in high levels of antisocial behavior was related to child conduct problems that the more time the child spent with said father, the more conduct problems that child exhibited. Consistent with the findings by Jaffee et al. (2003), the present study reveals that children of violent fathers are at greater risk for exhibiting conduct problems when mothers encourage father involvement than when they do not.

Limitations and Future Directions

Despite its contributions, this study also had a number of limitations. Although this was a moderately diverse sample, the findings are generalizable only to coresidential parents living in rural communities. Future research should examine these relationships among other family structures. In the present study, we considered residential fathers who had been in the home since the birth of the child, and these findings may therefore differ for households with nonresidential fathers or residential stepfathers. In addition, researchers are increasingly making the case that context of violent behavior matters for understanding its effects on parenting behaviors and children's development. Further, our measures of violence do not account for the motivation behind actions. For instance, IPV may include self-defensive violence by one partner. Future research should examine how context (e.g., situational violence) may be related to family functioning broadly, as well as more specifically to parenting behaviors and child conduct problems.

In addition, we did not take into account the violence witnessed by the child. Fantuzzo and Fusco (2007) reported that among police-substantiated cases of IPV, children had been present in the home during nearly half of all events, and 81% of these children were directly exposed to the violence. Thus, given that a substantial number of children living in violent homes directly witness the violence, future research will need to examine whether the findings reported in the present study vary based on child exposure.

Moreover, our measure of maternal gatekeeping was derived from only two questions of maternal encouragement, given time restrictions during the study visit. Therefore, we cautiously equate maternal gate-opening behavior as encouragement of fathers to interact with their children and understand that maternal encouragement does not necessarily mean that fathers actually spend more time interacting with their child. Although the assessment of maternal gatekeeping is not as rigorous as we may prefer, the findings from this study support and extend previous findings (Jaffee et al., 2003) on children's developmental outcomes as a function of father parenting in the context of IPV. Future research with a broader gatekeeping measure may provide a richer understanding of how maternal encouragement of father–child interaction may be related to child conduct problems.

Similarly, harsh–intrusiveness was the only domain of parenting we examined in the present study. Hostile, controlling parenting is likely to be related to other aspects of parenting such as diminished sensitive caregiving, and future research will need to disentangle the associations between multiple domains of parenting and child conduct problems in the context of IPV.

Implications

Despite the growing literature on the benefits of paternal involvement in child care, findings from our study demonstrate that some mothers may be justified in their concerns about the negative influence that some fathers may exert over their children's adjustment. The relationships found among IPV, parenting, and the moderating role of maternal encouragement provide important knowledge for researchers and clinicians who focus on child conduct problems, because they suggest that encouraging contact between high risk

fathers and their children may place children in jeopardy of poor adjustment. These findings may be relevant to clinicians and policy makers alike because they suggest that there may be fewer benefits to father–child interaction when the father has a tendency to exhibit violent behavior. Further, given that prior research links fathers' high-risk behavior and child maltreatment, the findings from this study suggest that targeting interventions that focus on the quality of care between violent fathers and children would be beneficial.

In the present study we focused on IPV during the first two years of life. During the early childhood developmental period, children are most reliant on their parents and have little autonomy outside the home, as compared to older, school-aged children. The quality of the parent–child relationship during this period sets the stage for long term socioemotional functioning. Therefore, interventions that encourage responsive parenting may reduce the risk of future behavioral and emotional problems, especially involving rural two-parent families with children at high risk of early problem behavior (Dishion et al., 2008).

Embedded in EST's description of how IPV affects child and family functioning is the notion that intimate partner violence represents a proximal, salient, and uncontrollable threat to young children (Cummings & Davies, 2010). Cast in this framework, the need for increased vigilance in the context of IPV is a characteristic symptom of children's concerns about emotional security that manifests itself in the form of psychosocial problems such as conduct disorders. Thus, a focus for clinicians and intervention programs should be to teach children coping skills that may be adaptive for their short-term outcomes but also for long-term development.

Past research has identified a number of individual- and family-level factors that may be positively associated with the incidence of IPV. For example, IPV is more common among African American, low-income, less educated, and younger women (Caetano et al., 2008; Moore, Probst, Tompkins, Cuffe, & Martin, 2007). Further, several studies have found that adhering to traditional gender roles is related to a higher risk of violence in one's relationship (Cunradi, 2009). These findings emphasize the need for more culturally informed and evidence-based decisions to address violence across communities.

In addition, getting a clearer picture of the characteristics of the mothers who encourage contact between harsh–intrusive fathers and their children will inform practitioners about how to serve children in homes with IPV. For example, although maternal depression was not a focus of this study, it could be that mothers who encouraged contact between harsh–intrusive fathers and their young children may have been struggling with their own regulatory processes (as a result of the IPV) and less able to buffer young children from exposure to violence and the father's harsh parenting behaviors.

Conclusion

Given that children are inextricably intertwined in their families, interventions supporting all family members are likely to be a more robust than individual approaches for understanding and reducing the incidence of child conduct problems in the context of IPV. From a dynamic family systems perspective, children are not only affected by IPV and their experiences with parenting behaviors; they also likely have an impact on their family environments by further

eliciting harsh interactions from their parents. Therefore, understanding the developmental processes that contribute to early and persistent problem behaviors can inform effective intervention and prevention strategies that curtail this deleterious trajectory. Indeed, intervening at the family level may have long-term positive implications for relationship building and family functioning (Dishion et al., 2008).

Acknowledgments

Support for this research was provided by the National Institute of Child Health and Human Development (PO1-HD-39667), with cofunding from the National Institute on Drug Abuse. Additional support was provided by the National Institute on Alcohol Abuse and Alcoholism (A12-0934) awarded as a predoctoral fellowship (F31) to the lead author.

References

- Allen SM, Hawkins AJ. Maternal gatekeeping: Mothers' beliefs and behaviors that inhibit greater father involvement in family work. Journal of Marriage and the Family. 1999; 61:199–212.
- Arbuckle, JL. Full information estimation in the presence of incomplete data. In: Marcoulides, GA., Schumacker, RE., editors. Advanced structural equation modeling. Mahwah, NJ: Erlbaum; 1996. p. 243-277.
- Archer J. Sex differences in aggression between heterosexual partners: A meta-analytic review. Psychological Bulletin. 2000; 126:651–680. [PubMed: 10989615]
- Bentler PM. Comparative fit indexes in structural models. Psychological Bulletin. 1990; 107:238–246. [PubMed: 2320703]
- Browne MW, Cudeck R. Alternative ways of assessing model fit. Sage Focus Editions. 1993; 154:136–136.
- Caetano R, Vaeth PA, Ramisetty-Mikler S. Intimate partner violence victim and perpetrator characteristics among couples in the United States. Journal of Family Violence. 2008; 23:507–518.
- Conger RD, Conger KJ, Martin MJ. Socioeconomic status, family processes, and individual development. Journal of Marriage and Family. 2010; 72:685–704. [PubMed: 20676350]
- Cowan PA, Cowan CP. Developmental psychopathology from family systems and family risk factors perspectives: Implications for family research, practice, and policy. Developmental psychopathology. 2006; 1:530–587.
- Cox MJ, Paley B. Understanding families as systems. Current Directions in Psychological Science. 2003; 12:193–196.
- Cummings, EM., Davies, PT. Marital conflict and children: An emotional security perspective. New York, NY: Guilford Press; 2010.
- Cunradi CB. Intimate partner violence among Hispanic men and women: The role of drinking, neighborhood disorder, and acculturation-related factors. Violence and Victims. 2009; 24:83–97. [PubMed: 19297887]
- Davies PT, Cummings EM. Marital conflict and child adjustment: An emotional security hypothesis. Psychological Bulletin. 1994; 116:387–411. [PubMed: 7809306]
- Davies PT, Sturge-Apple ML, Woitach MJ, Cummings EM. A process analysis of the transmission of distress from interparental conflict to parenting: Adult relationship security as an explanatory mechanism. Developmental Psychology. 2009; 45:1761–1773. [PubMed: 19899930]
- Dishion TJ, Shaw DS, Connell A, Gardner F, Weaver C, Wilson M. The family check-up with highrisk indigent families: Preventing problem behavior by increasing parents' positive behavior support in early childhood. Child Development. 2008; 79:1395–1414. [PubMed: 18826532]
- Eisenberg N, Taylor ZE, Widaman KF, Spinrad TL. Externalizing symptoms, effortful control, and intrusive parenting: A test of bidirectional longitudinal relations during early childhood. Development and Psychopathology. 2015; 27:953–968. [PubMed: 26439056]
- Erel O, Burman B. Interrelatedness of marital relations and parent-child relations: A meta-analytic review. Psychological Bulletin. 1995; 118:108–132. [PubMed: 7644602]

- Fantuzzo JW, Fusco RA. Children's direct exposure to types of domestic violence crime: A population-based investigation. Journal of Family Violence. 2007; 22:543–552.
- Gardner F. Methodological issues in the direct observation of parent-child interaction: Do observational findings reflect the natural behavior of participants? Clinical Child and Family Psychology Review. 2000; 3:185–198. [PubMed: 11225753]
- Goodman R. The Strengths and Difficulties Questionnaire: A research note. Journal of Child Psychology and Psychiatry. 1997; 38:581–586. [PubMed: 9255702]
- Grossman SF, Hinkley S, Kawalski A, Margrave C. Rural versus urban victims of violence: The interplay of race and region. Journal of Family Violence. 2005; 20:71–81.
- Gustafsson HC, Cox MJ. Relations among intimate partner violence, maternal depressive symptoms, and maternal parenting behaviors. Journal of Marriage and Family. 2012; 74:1005–1020. [PubMed: 23869110]
- Harold GT, Elam KK, Lewis G, Rice F, Thapar A. Interparental conflict, parent psychopathology, hostile parenting, and child antisocial behavior: Examining the role of maternal versus paternal influences using a novel genetically sensitive research design. Development and Psychopathology. 2012; 24:1283–1295. [PubMed: 23062297]
- Hinshaw SP, Lee SS. Conduct and oppositional defiant disorders. Child Psychopathology. 2003; 2:144–198.
- Holmbeck GN. Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literature. Journal of Consulting and Clinical Psychology. 1997; 65:599–610. [PubMed: 9256561]
- Hughes, HM., Luke, DA. Heterogeneity in adjustment among children of battered women. In: Holden, GW.Geffner, RA., Jouriles, EN., editors. Children exposed to marital violence: Theory research, and applied issues. Washington, DC: American Psychological Association; 1998. p. 185-221.
- Huth-Bocks AC, Hughes HM. Parenting stress, parenting behavior, and children's adjustment in families experiencing intimate partner violence. Journal of Family Violence. 2008; 23:243–251.
- Jaffee SR, Moffitt TE, Caspi A, Taylor A. Life with (or without) father: The benefits of living with two biological parents depend on the father's antisocial behavior. Child Development. 2003; 74:109– 126. [PubMed: 12625439]
- Jenkins JM. Mechanisms in the development of emotional organization. Monographs of the Society for Research in Child Development. 2002; 67:116–127. [PubMed: 12528425]
- McDonald R, Jouriles EN, Ramisetty-Mikler S, Caetano R, Green CE. Estimating the number of children living in partner-violent families. Journal of Family Psychology. 2006; 20:137–142. [PubMed: 16569098]
- Moore CG, Probst JC, Tompkins M, Cuffe S, Martin AB. The prevalence of violent disagreements in US families: Effects of residence, race/ethnicity, and parental stress. Pediatrics. 2007; 119:S68–S76. [PubMed: 17272588]
- Murray J, Farrington DP. Risk factors for conduct disorder and delinquency: Key findings from longitudinal studies. Canadian Journal of Psychiatry. 2010; 55:633–642. [PubMed: 20964942]
- Muthén, LK., Muthén, BO. Mplus users' guide. 6th. Los Angeles, CA: Muthén & Muthén; 1998–2010.
- NICHD Early Child Care Research Network. Child care and mother-child interaction in the first three years of life. Developmental Psychology. 1999; 35:1399–1413. [PubMed: 10563730]
- Pardini, DA., Waller, R., Hawes, SW. Familial influences on the development of serious conduct problems and delinquency. In: Morizot, J., Kazemian, L., editors. The development of criminal and antisocial behavior. New York, NY: Springer; 2015. p. 201-220.
- Peek-Asa C, Wallis A, Harland K, Beyer K, Dickey P, Saftlas A. Rural disparity in domestic violence prevalence and access to resources. Journal of Women's Health. 2011; 20:1743–1749.
- Preacher KJ, Rucker DD, Hayes AF. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. Multivariate Behavioral Research. 2007; 42(1):185–227. [PubMed: 26821081]
- Raver CC. Placing emotional self-regulation in sociocultural and socioeconomic contexts. Child Development. 2004; 75:346–353. [PubMed: 15056189]

- Roy KM, Dyson OL. Gatekeeping in context: Babymama drama and the involvement of incarcerated fathers. Fathering: A Journal of Theory, Research, and Practice About Men as Fathers. 2005; 3:289–310.
- Schoppe-Sullivan SJ, Brown GL, Cannon EA, Mangelsdorf SC, Sokolowski MS. Maternal gatekeeping, coparenting quality, and fathering behavior in families with infants. Journal of Family Psychology. 2008; 22:389–398. [PubMed: 18540767]
- Schumacker, RE., Lomax, RG. A beginner's guide to structural equation modeling. Mahwah, NJ: Erlbaum; 1996.
- Shaw DS, Gilliom M, Ingoldsby EM, Nagin DS. Trajectories leading to school-age conduct problems. Developmental Psychology. 2003; 39:189–200. [PubMed: 12661881]
- Snyder, H. Epidemiology of official offending. In: Loeber, R., Farrington, DP., editors. Child delinquents: Development, intervention and service needs. Thousand Oaks, CA: Sage; 2001. p. 25-46.
- Stover CS, Morgos D. Fatherhood and intimate partner violence: Bringing the parenting role into intervention strategies. Professional Psychology: Research and Practice. 2013; 44:247–256.
- Straus MA, Gelles RJ. Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. Journal of Marriage and the Family. 1986:465–479.
- Straus, MA., Gelles, RJ., Smith, C. Physical violence in American families: Risk factors and adaptations to violence in 8,145 families. New Brunswick, NJ: Transaction; 1990. p. 29
- Straus MA, Sweet S. Verbal/symbolic aggression in couples: Incidence rates and relationships to personal characteristics. Journal of Marriage and the Family. 1992; 54:346–357.
- Tanner-Smith EE, Wilson SJ, Lipsey MW. The comparative effectiveness of outpatient treatment for adolescent substance abuse: A meta-analysis. Journal of Substance Abuse Treatment. 2013; 44:145–158. [PubMed: 22763198]
- Tiefenthaler J, Farmer A, Sambira A. Services and intimate partner violence in the United States: A county-level analysis. Journal of Marriage and Family. 2005; 67:565–578.
- Tolan, PH., Dodge, K., Rutter, M. Tracking the multiple pathways of parent and family influence on disruptive behavior disorders. In: Tolan, PH., Leventhal, BL., editors. Disruptive behavior disorders. New York, NY: Springer; 2013. p. 161-191.
- Tucker LR, Lewis C. A reliability coefficient for maximum likelihood factor analysis. Psychometrika. 1973; 38:1–10.
- Van Egeren LA. Prebirth predictors of coparenting experiences in early infancy. Infant Mental Health Journal. 2003; 24:278–295.
- Vernon-Feagans L, Cox M. The Family Life Project: An epidemiological and developmental study of young children living in poor rural communities. Monographs of the Society for Research in Child Development. 2013; 78(5):1–150.
- Waller MR, Swisher R. Fathers' risk factors in fragile families: Implications for healthy relationships and father involvement. Social Problems. 2006; 53:392–420.
- Webster-Stratton C, Hammond M. Marital conflict management skills, parenting style, and early-onset conduct problems: Processes and pathway. Journal of Child Psychology and Psychiatry. 1999; 40:917–927. [PubMed: 10509886]
- Zvara BJ, Mills-Koonce WR, Heilbron N, Clincy A, Cox MJ. Family Life Project Key Contributors. The interdependence of adult relationship quality and parenting behaviors among African American and European couples in rural, low-income communities. Infant and Child Development. 2015; 24:343–363. [PubMed: 26430390]

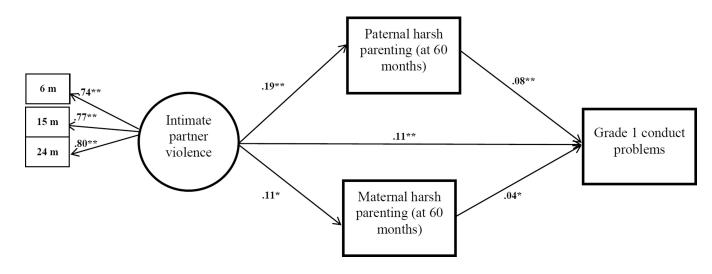


Figure 1.

Mediating Effects of Maternal and Paternal Parenting Behavior in the Associations Between IPV and Child Conduct Problems in the First Grade *Note.* $X^2 = (44, N=394) = 65$. CFI = 0.97. RMSEA = .03.

p* < .05. *p* < .01.

Table 1

Variables
Correlations among
and
Statistics
Descriptive

	Μ	<u>S</u> D	1	7	e	4	S	9	٢	8	6	10	11	12	13
1. Child conduct problems	0.81	0.67	I												
2. Father's harsh-intrusive parenting	3.22	1.04	.20**												
3. Mothers' harsh–intrusive parenting	3.15	1.05	.29 **	.44	Ι										
4. Maternal gatekeeping	1.28	2.06	.06	.12	.05										
5. IPV 6 months	0.17	0.60	.25 **	.22	.20 **	00									
6. IPV 15 months	0.15	0.60	.24 **	.17 **	.23 **	01	.81 **								
7. IPV 24 months	0.06	0.21	.16**	** 60.	.11	.03	.67 **	.55 **							
8. Child sex			02	.06	90.	04	06	08	05						
9. Race			.17 **	.24 **	.33 **	01	.24 **	.23 **	.12*	05					
10. Income-to-needs	2.32	1.89	20 **	21 **	30**	.02	15*	14 *	10^{*}	.06	30 **	I			
11. Maternal education	15.2	2.57	18**	29 **	36 **	03	17 **		08*	.03	20 **	.54 **	I		
12. Paternal education	15.1	2.70	19 **	33 **	37 **	.01	11		03	02	24	.45**	.61 **		
13. Data collection site			06	10^{*}	.21*	16^{*}	16^{*}	12*	.01	.13 **	54 **	.15 **	.13**	.21 ^{**}	
* p < .05.															
**															
p < .01.															

Table 2

Standardized Parameter Estimates Predicting Child Conduct Problems at Grade 1

	Υ. Έ	Model 1 Full Model	1 del	Low (High E	Model 2 Low Gatekeeping (High Encouragement)	ing ment)	Model 2 High Gatekeeping (Low Encouragement)	Model 2 High Gatekeeping .ow Encouragemen	oing ment)
Variable	ď	SE	d	ß	SE	d	e B	SE	d
Target child's sex	.01	.06	.17	.12	.12	.03	.06	.04	.25
Target child's race	.04	.05	.04	.47	.30	.16	.33	.20	.20
Income-to-needs	.03	.01	.02	.12	.06	.23	.02	.03	.14
Maternal education	60.	90.	.26	60.	.38	Π.	.01	.15	.43
Paternal education	.07	90.	.19	.35	.12	60.	.11	.14	.23
Study site	.01	.03	.31	.16	.18	.18	00 [.]	.15	.33
Maternal gatekeeping ^a	.10	60.	.04						
Intimate partner violence	Π.	.03	< .01	.43	.21	.02	.04	.07	.10
Mothers' harsh-intrusive parenting	.04	.02	.02	.01	11.	.22	.04	.07	.15
Fathers' harsh-intrusive parenting	.08	.05	< .01	.17	.13	.03	.10	.06	.54

 $^{a}\!Maternal$ gate keeping was designated in the model as the dichotomized variable "group."