

The Associations of Constructive and Destructive Interparental Conflict to Child Well-Being Among Low-Income Families

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Abstract

Interparental conflict is a well-established precursor to child maladjustment. However, little is understood of the role of different interparental conflict in shaping the developmental outcomes of young children, especially those from socioeconomically disadvantaged backgrounds. This study uses data from a large and racially diverse sample of low-income, unmarried mothers with young children ($n = 1,297$) to examine the processes linking parental constructive conflict, destructive conflict, intimate partner violence (IPV) to child behavior problems, and child emotional insecurity as a mediator of these processes. Path analyses were conducted to estimate structural paths between (a) conflict constructs and child behavior problems, (b) conflict constructs and child emotional insecurity, and (c) child emotional insecurity and child behavior problems. Results demonstrated that constructive conflict was associated with decreased levels of both child

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emotional insecurity and child behavior problems, whereas destructive conflict was associated with increased levels of both child outcomes. IPV was associated with increased levels of child emotional insecurity only. Child emotional insecurity mediated the links between all three conflict constructs and child behavior problems. Such findings suggest the need for clinicians to help raise awareness regarding the consequences of children's exposure to different interparental conflict and educate parents about children's sense of emotional security in the family.

Keywords

domestic violence, violence exposure, interpersonal violence, Building Strong Families, Emotional Security Theory

Interparental anger, verbal antagonism, and physical aggression are common occurrences in many families with young children (Cummings, Goeke-Morey, & Papp, 2003). Partner relationship conflict is highest when children are young, including during infancy (Cummings & Davies, 2010). High levels of interparental conflict contribute to family instability and the dissolution of parenting relationships (Cummings & Davies, 2010; Gottman, 1994). Although families from all socioeconomic backgrounds are affected by interparental conflict, rates of exposure to interparental conflict are higher in low-income households (Stith, Smith, Penn, Ward, & Tritt, 2004). Low-income, unmarried couple families have become a growing concern for many researchers and policy makers, as such families experience multiple stressors (e.g., poverty, unemployment, parenting stress, relationship instability) that uniquely contribute to increasing interparental conflict and child maladjustment (Brown, 2010; Kopystynska, Paschall, Barnett, & Curran, 2017).

In addition, among low-income families, research has shown that lower levels of parental education are linked with increased family instability (e.g., job loss, residential change). In the context of family instability, preschoolers have demonstrated heightened concerns about security in their families amid destructive interparental conflict (Coe, Davies, & Sturge-Apple, 2017). However, studies focused on interparental conflict and child insecurity with low-income samples are few in number. We address this gap by using data from the Building Strong Families (BSF) project, which includes a large and diverse sample of low-income, unmarried couples with young children.

Interparental conflict is broadly defined as any major or minor interparental interaction that involves a difference of opinion, whether it is mostly negative or positive (Cummings & Davies, 2010). There are several forms of interparental conflict that have been examined in the literature: destructive

conflict (verbal hostility, nonverbal anger, and withdrawal behaviors; Cummings et al., 2003), constructive conflict behaviors (problem solving and resolution in the face of conflict; Cummings et al., 2003), and intimate partner violence (IPV), including physical aggression and sexual coercion (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Research shows that many children are victims of interparental conflict. For example, the National Survey of Children's Exposure to Violence found that 9.2% of children aged 2 to 5 years and 7.1% of children aged 1 year and younger directly witnessed partner assault, or IPV, in the past year based on an adult caregiver's report (Finkelhor, Turner, Shattuck, & Hamby, 2015).

Prior research also suggests that poverty is a key predictor of IPV, with couples residing in impoverished neighborhoods experiencing an increased risk of male-to-female partner violence, especially for racial and ethnic minority couples (Beyer, Wallis, & Hamberger, 2015; Cunradi, Caetano, Clark, & Schafer, 2000). However, we know less about the prevalence of other forms of interparental conflict and the specific processes by which they are linked with subsequent child behavior problems among low-income families. Collectively, prior research and current gaps in the literature suggest the need to examine the roles of multiple forms of interparental conflict, including IPV, in young children's behavioral outcomes, and examine the underlying mechanisms linking interparental conflict with poor child outcomes, especially among low-income, unmarried couple families.

Destructive Interparental Conflict and Child Outcomes

Destructive conflict involves the use of verbal hostility, nonverbal anger, and withdrawal behaviors (Cummings et al., 2003). Destructive interparental conflict is well established as a precursor to child behavior problems (for reviews, see Cummings & Davies, 2010; Grych & Fincham, 2001). It has been shown to have both direct (Cummings, Goeke-Morey, & Papp, 2004) and indirect (Davies, Martin, & Cicchetti, 2012) effects on child behavior problems, especially as mediated by child emotional insecurity. That is, exposure to destructive conflict raises children's level of emotional distress (e.g., anxiety, anger; Davies & Cummings, 1994) regarding the interparental relationship, and subsequently increases children's risk of exhibiting aggression and other behavior problems (Davies et al., 2012). Research has consistently shown that children who are exposed to high levels of destructive conflict are likely to exhibit depression, anxiety, and social withdrawal (Brock & Kochanska, 2016; Clements, Martin, Randall, & Kane, 2014; Cummings & Davies, 2010; Davies et al., 2012; Katz & Woodin, 2002).

Constructive Interparental Conflict and Child Outcomes

Constructive conflict includes parental support, affection, problem solving, and resolution and is proposed to be associated with decreased negative emotions (Brock & Kochanska, 2016; Cheung, Cummings, Zhang, & Davies, 2016; Cummings et al., 2003). For example, when exposed to constructive conflict, children are less likely to intervene in the interparental problem (Cummings & Davies, 1996), which may buffer children from emotional distress. Although researchers have hypothesized that constructive conflict may decrease children's concerns about emotional security and thus decrease their behavior problems (Cummings et al., 2003; Easterbrooks, Cummings, & Emde, 1994), there is relatively little empirical evidence examining this hypothesis, and available studies show mixed results.

As a case in point, a study of 235 middle-income families with children aged 5 to 7 years found that constructive conflict was positively associated with child emotional security, but not with child prosocial behaviors (McCoy, Cummings, & Davies, 2009). Another study of 201 low-income mothers with 2-year-old children examined constructive and destructive conflict and found that constructive conflict did not predict child emotional insecurity, but was associated with less child behavior problems (Davies et al., 2012, Study 2). These results suggest the need for additional research examining the role of constructive conflict in children's socioemotional and behavioral development.

IPV and Child Outcomes

Another limitation of existing research is that studies examining destructive conflict have often operationalized destructive conflict to include IPV. For instance, one study treated destructive conflict (e.g., verbal aggression such as shouting, yelling) and physical IPV (e.g., beating up, slapping) as a single latent construct (Davies et al., 2012, Study 2) although the two tap into different aspects of interparental conflict. Thus, it is possible that studies showing that destructive conflict is associated with heightened levels of child emotional insecurity and child behavior problems may be due primarily to the effect of children's exposure to physical IPV.

IPV has also been shown to be linked with child emotional insecurity. Using a community-based sample of families with elementary school children, El-Sheikh, Cummings, Kouros, Elmore-Staton, and Buckhalt (2008) demonstrated that IPV was associated with increased levels of child emotional insecurity which, in turn, was linked with increased levels of child behavior problems.

In addition to physical aggression, sexual forms of IPV (i.e., sexual coercion) have been linked with negative child outcomes (Jouriles, McDonald, Vu, & Sargent, 2016; Symes, Maddoux, McFarlane, Nava, & Gilroy, 2014). For example, research has shown that male-perpetrated sexual IPV toward children's mothers is associated with increased risk of child externalizing problems (Jouriles et al., 2016). Based on these findings, our measure of IPV included both physical and sexual forms of partner violence. Little is currently known about how IPV, separate from destructive conflict, is linked with subsequent child behavior problems among low-income, unmarried couple families. Our study makes a unique contribution to the literature by including IPV as a construct separate from destructive conflict.

Emotional Security Theory (EST) and Reformulated Emotional Security Theory (EST-R)

Emotional Security Theory (EST) (Davies & Cummings, 1994) posits that repeated exposures to interparental conflicts, such as escalating anger and violence, undermine children's sense of emotional security in the interparental relationship (Davies & Cummings, 1994). EST further argues that children's concerns about their emotional security in the interparental relationship reflect a latent goal system that involves children's emotional reactivity (i.e., intense, dysregulated, and protracted distress in the face of interparental conflict), regulation of exposure (i.e., increased avoidance or involvement in interparental conflict), and internal representations (i.e., negative appraisal of the implication of interparental conflict for self and family; Davies & Cummings, 1994). The parent-child attachment system is thought to be linked with children's emotional security, with secure attachment relationships contributing to children's regulation of negative emotional arousal. Exposure to destructive interparental conflict can undermine parent-child attachment security by eroding the child's confidence in the parent's ability to provide support and protection (e.g., the parent becomes low in warmth or unresponsive as a result of conflict; Cummings & Davies, 2010). This insecurity about the parent-child attachment relationship can extend to the child's insecurity about the marital or interparental relationship. That is, an insecure parent-child attachment system may contribute to children's difficulty maintaining their emotional security about the interparental relationship. Children are thought to develop psychological and behavioral problems as a result of continued difficulty maintaining emotional security amid high levels of interparental conflict (Davies & Martin, 2014).

The Reformulated Emotional Security Theory (EST-R) (Davies & Martin, 2013; Davies, & Sturge-Apple, 2007) elucidated some gaps in understanding

the dynamics of child emotional insecurity (Davies & Martin, 2014). EST-R is meant to complement prior work with EST and mainly attributes the social defense system (SDS) for organizing children's emotional security. Briefly, the SDS stems from early ethological conceptions of the fear system (Bowlby, 1969, 1988; Harlow, 1959), which is a behavioral system assumed to have been developed in the context of conflict between members of social groups across human phylogenetic history, and thus allows for efficiently identifying social threats and responding in ways that avoid or defuse such threats (Davies, & Sturge-Apple, 2007). In this context, fear that arises from exposure to parental conflict is a key mechanism that contributes to children's emotional insecurity and subsequent adjustment difficulties (Davies, & Sturge-Apple, 2007). Furthermore, EST-R argues that destructive conflict is more salient than constructive conflict to children, in part, because constructive conflict behaviors do not carry the same emotional valence as destructive conflict behaviors (Davies & Martin, 2014).

Prior Studies of Interparental Conflict Using the BSF Data Set

Recently, Kopystynska et al. (2017) used data from the BSF project, a study of over 5,000 low-income, unmarried parents of young children who participated in a relationship skills intervention (Wood, Moore, Clarkwest, Hsueh, & McConnell, 2010), to examine the links between constructive conflict, destructive conflict, and child emotional insecurity. The researchers first conducted a latent profile analysis to examine patterns of interparental conflict among mothers and fathers and then used the identified profiles as predictors of children's emotional insecurity when they were approximately 36 months old. Results showed that children's emotional security was most threatened when mothers used high levels of destructive conflict (Kopystynska et al., 2017). However, Kopystynska et al. (2017) used data from a single time point limiting the study to be cross-sectional and did not examine child behavioral problems.

Roopnarine and Dede Yildirim (2018), also using data from the BSF project, examined the links between parenting functioning and child behavior problems and found that avoidance of destructive conflict was linked with less child externalizing behavior problems. However, examining the process between destructive conflict and child behavior problem was not an aim of the study. Thus, child emotional insecurity was not examined as a potential mediator. The researchers did examine destructive conflict and IPV as separate constructs in the same model and found that both destructive conflict and IPV uniquely predicted children's externalizing problems, with higher levels of IPV predicting more child externalizing problems and the effect size of

IPV being larger than that of destructive conflict among BSF control group fathers. It should be noted, however, that Roopnarine and Dede Yildirim (2018) were primarily interested in testing the effects of the BSF relationship skills intervention on the pathway between a number of parenting variables and child behavior problems. They used fathers' self-report data only and included fathers in both the treatment and control group in their analyses. We address some of these limitations in our analyses.

As alluded to above, the current study also uses data from the BSF project, but it is different from Kopystynska et al. (2017) and Roopnarine and Dede Yildirim's (2018) in that we examine mechanisms underlying the links between interparental conflict and child behavior problems via child emotional insecurity. We include child behavior problems as our main outcome because research has shown a direct link between interparental conflict (especially destructive conflict) and child behavior problems (Cummings et al., 2004). In addition, we use data from two time points and examine destructive interparental conflict and IPV separately.

Current Study

The purpose of the current study was to examine the relationships of constructive conflict, destructive conflict, and IPV with young children's behavior problems. We examined children's emotional insecurity as a mediator of these processes. This study uses data from a large and diverse sample of low-income, unmarried couple families. Use of this sample is a novel contribution to the literature. Analyses are also strengthened by a robust set of control variables that previous studies have shown to be linked to interparental conflict and child behavior problems. For example, maternal depression has been shown to be associated with both interparental conflict and child behavior problems (Beck, 1999). Hypotheses were derived from EST and EST-R. We hypothesized the following:

Hypothesis 1: Destructive conflict would be associated with increased levels of child behavior problems.

Hypothesis 2: Constructive conflict would be associated with decreased levels of child behavior problems.

Hypothesis 3: Child emotional insecurity would mediate the association between destructive conflict and child behavior problems.

Hypothesis 4: IPV and destructive conflict would have distinct associations with child behavior problems in that the effect size for IPV on child behavior problems would be greater than that of destructive conflict on child behavior problems.

Method

BSF Intervention

The BSF project was a randomized controlled trial of a healthy marriage and relationship strengthening intervention for unmarried, low-income couples conducted across eight cities in the United States (Wood et al., 2010). The project was funded by the Office of Planning, Research, and Evaluation in the Administration for Children and Families, U.S. Department of Health and Human Services and was conducted by Mathematica Policy Research between 2005 and 2011. The BSF project recruited opposite-sex couples ($n = 5,102$) from hospitals, maternity wards, prenatal clinics, health clinics, and special nutritional programs for Women, Infants, and Children (WIC) clinics. Couples were eligible to enroll if (a) both the mother and father agreed to participate in the program, (b) the couple was romantically involved, (c) the couple was either expecting a baby together or had a baby that was younger than 3 months old, (d) the couple was unmarried at the time their baby was conceived, and (e) both the mother and father were at least 18 years old (Wood, Moore, Clarkwest, Killewald, & Monahan, 2012).

Mathematica Policy Research obtained couples' written consent and randomly assigned them into either an intervention group ($n = 2,553$) or a control group ($n = 2,549$). This article uses data from families in the control group only. BSF data were collected at three time points. First, both parents completed a brief eligibility survey at baseline, which was near the time of the child's birth. Then, after families had enrolled in the BSF project, two extensive follow-up surveys were conducted via telephone at 15 months (T1) and 36 months (T2). Comprehensive reports of the sample and study procedures are available elsewhere (Moore, Wood, Clarkwest, Killewald, & Monahan, 2012).

Participants

The current study's analyses used data from 1,297 mothers in the BSF project. The authors excluded 2,553 families assigned to the BSF intervention group because of identified differences between the intervention and control groups. The intervention group reported significantly lower destructive conflict, child emotional insecurity, and child behavior problems compared with the control group. We also excluded 465 families from the Atlanta site because mothers were not asked whether the IPV was perpetrated by the BSF father or another partner. Finally, we excluded 787 families who were ineligible to provide data on child emotional insecurity at T2 due to infrequent contact between the mother and father. In the analytic sample, mothers

reported significantly higher numbers of biological children with the BSF father compared with the nonanalytic sample. No other significant sociodemographic differences were found between the analytic and nonanalytic samples.

Measures

Destructive interparental conflict. Destructive interparental conflict behaviors were assessed at T1 using a measure developed by the BSF staff with input from experts (for details, see Wood et al., 2010). The measure has nine items that primarily represent moderate verbal aggression couples use, which could be harmful to the partner relationship (e.g., “Partner blames me for things that go wrong,” “Partner puts down my opinions, feelings, or desires”). These items have been shown to predict couples’ partner relationship dissolution (Gottman, 1994). Mothers rated items on a 4-point scale from 1 = *often* to 4 = *never*. The scale was reverse-coded so that higher scores reflected more frequent use of destructive conflict behaviors. We created a composite by averaging the nine items ($\alpha = 0.86$).

Constructive interparental conflict. Constructive interparental conflict behaviors were assessed at T1 using a measure developed by BSF staff with input from the same experts (for details, see Wood et al., 2010). The measure has eight items of which this study used five that assess behaviors couples use to resolve verbal arguments and disagreements without harming the partner relationship (e.g., “We are pretty good listeners, even when we have different positions on things,” “Even when arguing we can keep a sense of humor”). Mothers rated items on a 4-point scale from 1 = *often* to 4 = *never*. The scale was reverse-coded so that higher scores reflected more use of constructive conflict behaviors. We created a composite by averaging the five items ($\alpha = 0.87$).

IPV. IPV was measured at T1 with 12 items from the physical assault subscale and a single item from the sexual coercion subscale of the revised Conflict Tactic Scale (CTS2; Straus et al., 1996). Items pertained to physical violence (e.g., “beating,” “slapping”) and sexual violence (i.e., “Use threats or force to make you have sex or do sexual things you didn’t want to do”). Respondents indicated whether such acts were committed against them by the BSF partner, in the past year (0 = *no*, 1 = *yes*). A binary variable was created, representing whether the mother experienced any of the 13 IPV instances committed by the BSF father (0 = *no IPV*, 1 = *any IPV*). This is consistent with the scoring method recommended by Straus and most commonly used with the CTS2 physical assault and sexual coercion subscales (Straus, 2004).

Child emotional insecurity. Child emotional insecurity amid interparental conflict was assessed at T2 using a measure developed by the BSF staff in consultation with Mark Cummings (Moore et al., 2013). The BSF staff drew 10 items from the emotional reactivity and behavior dysregulation subscales of the Security in the Marital Subsystem-Parent Report Inventory (SIMS-PR; Davies, Forman, Rasi, & Stevens, 2002). These items included parents' reports of children's *emotional reactions* (e.g., "[Child] appeared angry") and *behavior dysregulation* (e.g., "[Child] yelled at family members") in response to seeing interparental arguments and disagreements in the past month. Mothers rated these items on a 4-point scale from 1 = *often* to 4 = *never*. The scale was reverse-coded so that higher scores reflected higher levels of child emotional insecurity. We created a composite by averaging the 10 items ($\alpha = 0.85$).

Child behavior problems. Child behavior problems were assessed at T2 with 26 items from the Behavior Problems Index (BPI; Peterson & Zill, 1986). The 26 items included child internalizing (e.g., "Cries too much") and externalizing behavior problems (e.g., "Has a very strong temper and loses it easily"). These items are similar to those from the Child Behavior Checklist (CBCL; Achenbach, 1991) used in prior studies examining marital conflict and child adjustment (Davies et al., 2012; Goeke-Morey, Cummings, & Papp, 2007). Mothers rated these items on a 3-point scale from 1 = *often true* to 3 = *never true*. The scale was reverse-coded so that higher scores reflected higher levels of child behavior problems. We created a composite by averaging the 26 items ($\alpha = 0.87$).

Maternal depressive symptoms. Maternal depressive symptoms were measured at T1 using the 12-item version of the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Items assessed how respondents felt or behaved in the past week (e.g., "I felt depressed," "I felt sad,"). Mothers rated items on a 4-point scale from 1 = *rarely or none of the time* (i.e., less than 1 day in the past week) to 4 = *most or all of the time* (i.e., 5-7 days in the past week). We created a composite by averaging the items ($\alpha = 0.87$).

Couple, mother, and child sociodemographic characteristics. The following characteristics were assessed at baseline based on both mothers' and fathers' reports: ethnicity and race, education, number of biological children mother and father had together, and marital status. Mother's age was assessed at baseline. Child's gender was based on both mothers' and fathers' reports at T1.

Analysis Plan

Path model analyses examined the links between mothers' reports of destructive conflict, constructive conflict, and IPV at T1 and their children's emotional insecurity and behavior problems at T2. Analyses were conducted using Stata Version 14.2 (StataCorp, 2015). The comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the 90% confidence interval (CI) for RMSEA were used to evaluate the fit between the hypothesized models and the observed data. Cutoff values of 0.95 for CFI, 0.06 for RMSEA, and 0.05 for the lower bound of the 90% CI for RMSEA are generally indicative of good model fit (Hu & Bentler, 1999; Kenny, 2015).

For all analytic models, every key variable was regressed on all of the control variables. Across all control variables, data were missing in 0% to 11.18% (for maternal depression) of the cases. Data for mothers' reports of constructive conflict and destructive conflict were missing in 12.18% and 12.25% of the cases, respectively. Mothers' reports of IPV were missing in 10.49% of the cases. Missingness mechanism analysis showed that missingness of constructive and destructive conflict was related to being White or Hispanic, and missingness of IPV was related to being Hispanic. These results suggested that the missingness mechanism for the key predictor variables is missing at random (MAR).

Furthermore, BSF staff conducted attrition testing based on the What Works Clearinghouse recommendations (U.S. Department of Education, 2008). Eighty-three percent of mothers responded at T1, and 80% of mothers responded at T2 (Moore et al., 2013). BSF staff reported that the pooled sample for mothers who responded at both time points had sufficiently low attrition to meet What Works Clearinghouse evidence standards (for details, see Moore et al., 2012; Wood et al., 2010). In other words, it was determined that the study sample had low risk of attrition bias. Full information maximum likelihood (MLMV in Stata) was used to avoid missing data bias and maximize the sample size. Full information maximum likelihood is a preferred method for model estimation in the context of missing data (Allison, 2003).

Results

Table 1 provides descriptive statistics of key study variables. A majority of the mothers reported (e.g., often, sometimes, or rarely) to at least one instance of constructive conflict ($M = 3.28$, $SD = 0.71$) and destructive conflict ($M = 2.24$, $SD = 0.73$). With regard to IPV, 16.71% of mothers reported experiencing IPV from the BSF father. All mothers reported on child emotional insecurity ($M = 1.43$, $SD = 0.52$) and child behavior problems ($M = 0.39$, $SD = 0.27$).

Table 1. Sample Characteristics.

Variable	M (SD) or %
Child outcome variables	
Child behavior problems at 36 months (range = 0-1.62) ^a	0.39 (0.27)
Child emotional insecurity at 36 months (range = 1-3.80) ^a	1.43 (0.52)
Interparental conflict and violence variables	
Destructive conflict at 15 months (range = 1-4) ^a	2.24 (0.73)
Constructive conflict at 15 months (range = 1-4) ^a	3.28 (0.71)
Intimate partner violence by father at 15 months (yes)	16.71%
Control variables	
Couple's ethnicity and race at baseline	
Black	48.76%
White	17.50%
Hispanic	22.08%
Other	11.66%
Couple's education at baseline	
Neither parent has high school diploma	17.67%
One parent has high school diploma	33.93%
Both parents have high school diploma	48.40%
Couple married at baseline (yes)	6.24%
Couple's number of children at baseline (range = 1-5) ^a	1.39 (0.76)
Mother's depressive symptoms at 15 months (range = 1-4) ^a	1.45 (0.54)
Mother's age at baseline (range = 18-43 years)	22.96 (4.58)
Child's gender at 15 months (boy)	48.91%

Note. $n = 1,297$.

^aHigher numbers indicate higher levels of the construct.

Destructive Conflict and Child Outcomes

We examined mothers' reports of destructive conflict as a predictor of child emotional insecurity and child behavior problems. As shown in Table 2 and Figure 1, structural paths were estimated between (a) destructive conflict and child behavior problems, (b) destructive conflict and child emotional insecurity, and (c) child emotional insecurity and child behavior problems. The estimation for the path model converged normally and the model had good fit, $\chi^2(4) = 9.46, p < 0.05$, RMSEA = 0.03, 90% CI = [0.00, 0.06], CFI = 0.99. Destructive conflict at T1 significantly predicted both child emotional insecurity and child behavior problems at T2 in that more destructive conflict was associated with more child emotional insecurity, $\beta = 0.19$,

Table 2. Coefficients Estimating Child Emotional Insecurity and Child Behavior Problems by Individual Models.

Regression paths	Constructive Conflict Model				Destructive Conflict Model				Intimate Partner Violence Model			
	B	SE	β	p	B	SE	β	p	B	SE	β	p
Child's emotional insecurity												
Constructive conflict	-.05	.02	-.06	*	—	—	—	—	—	—	—	—
Destructive conflict	—	—	—	—	.13	.02	.19	***	—	—	—	—
Intimate partner violence (yes)	—	—	—	—	—	—	—	—	.14	.04	.10	***
Couple's ethnicity and race (reference: Black)												
White	.08	.04	.06	*	.09	.04	.07	*	.08	.04	.06	*
Hispanic	-.02	.04	-.02		-.01	.04	-.01		-.02	.04	-.02	
Other	.05	.05	.03		.06	.05	.04		.06	.05	.04	
Couple's education level	-.01	.02	-.01		-.01	.02	-.01		-.01	.02	-.01	
Couple married at baseline (yes)	.06	.07	.03		.06	.07	.03		.07	.06	.03	
Couple's number of biological children	.00	.02	.01		.00	.02	.01		.01	.02	.01	
Mother's depressive symptoms	.18	.03	.18	***	.12	.03	.12	***	.17	.03	.18	***
Mother's age	-.01	.00	-.05		-.01	.00	-.05		-.01	.00	-.05	
Child's gender (boy)	.02	.03	.02		.03	.03	.03		.02	.03	.02	
Child behavior problems												
Constructive conflict	-.03	.01	-.08	*	—	—	—	—	—	—	—	—
Destructive conflict	—	—	—	—	.05	.01	.14	***	—	—	—	—
Intimate partner violence (yes)	—	—	—	—	—	—	—	—	.02	.02	.03	
Child emotional insecurity	.20	.02	.39	***	.19	.02	.37	***	.20	.02	.39	***
Couple's ethnicity and race (reference: Black)												
White	-.01	.02	-.02		-.01	.02	-.01		-.02	.02	-.02	
Hispanic	.03	.02	.05	*	.04	.02	.06	*	.03	.02	.05	
Other	-.02	.02	-.03		-.02	.02	-.02		-.02	.02	-.03	
Couple's education level	-.03	.01	-.08	**	-.03	.01	-.08	**	-.03	.01	-.08	**
Couple married at baseline (yes)	-.01	.03	-.01		-.01	.03	-.01		-.01	.03	-.01	
Couple's number of biological children	.00	.01	-.01		-.01	.01	-.02		-.01	.01	-.02	
Mother's depressive symptoms	.08	.02	.16	***	.06	.01	.12	***	.08	.02	.17	***
Mother's age	.00	.00	.02		.00	.00	.02		.00	.00	.02	
Child's gender (boy)	.00	.01	.01		.01	.01	.01		.00	.01	.00	

Note. B = unstandardized coefficients; SE = unstandardized bootstrapped standard errors; β = standardized coefficients. The R^2 values for child emotional insecurity and child behavior problems in the constructive conflict model were .05 and .23, respectively. The R^2 values for child emotional insecurity and child behavior problems in the destructive conflict model were .08 and .24, respectively. The R^2 values for child emotional insecurity and child behavior problems in the intimate partner violence model were .06 and .22, respectively.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

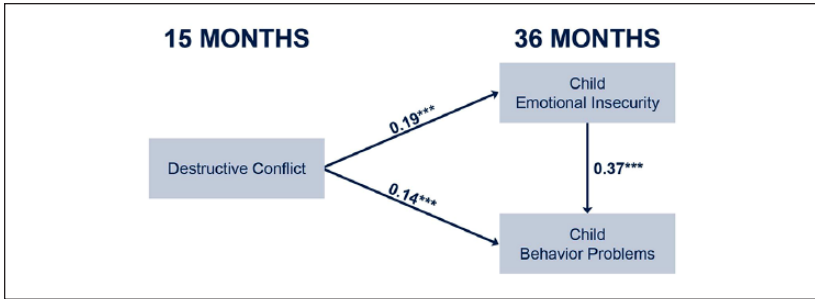


Figure 1. Path model examining destructive conflict at 15 months as a predictor of child emotional insecurity and child behavior problems at 36 months.

Parameter estimates are standardized path coefficients. Study variables were regressed on a full set of control variables, including couple's ethnicity and race, couple's education, couple's number of biological children, couple's marital status, mother's age, mother's depressive symptoms, and child's gender. $\chi^2(4) = 9.46, p < 0.05$, RMSEA = 0.03, 90% CI = [0.00, 0.06], CFI = 0.99.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

$p < 0.001$, 95% CI = [0.13, 0.25], and more child behavior problems, $\beta = 0.14, p < 0.001$, 95% CI = [0.08, 0.21]. This is consistent with the first hypothesis that destructive conflict would be associated with increased levels of child behavior problems (H1). Child emotional insecurity positively and significantly predicted child behavior problems, $\beta = 0.37, p < 0.001$, 95% CI = [0.31, 0.43]. This lends support for the third hypothesis (H3) that child emotional insecurity mediates the association between destructive conflict and child behavior problems.

Constructive Conflict and Child Outcomes

Next, we examined mothers' reports of constructive conflict as a predictor of child emotional insecurity and child behavior problems. As shown in Table 2 and Figure 2, structural paths were estimated between (a) constructive conflict and child behavior problems, (b) constructive conflict and child emotional insecurity, and (c) child emotional insecurity and child behavior problems. The estimation for the path model converged normally and the model had good fit, $\chi^2(4) = 9.41, p < 0.05$, RMSEA = 0.03, 90% CI = [0.00, 0.06], CFI = 0.99. Constructive conflict at T1 significantly predicted both child emotional insecurity and child behavior problems at T2 in that more constructive conflict was associated with less child emotional insecurity, $\beta = -0.06, p < 0.05$, 95% CI = [-0.12, -0.001], and less child

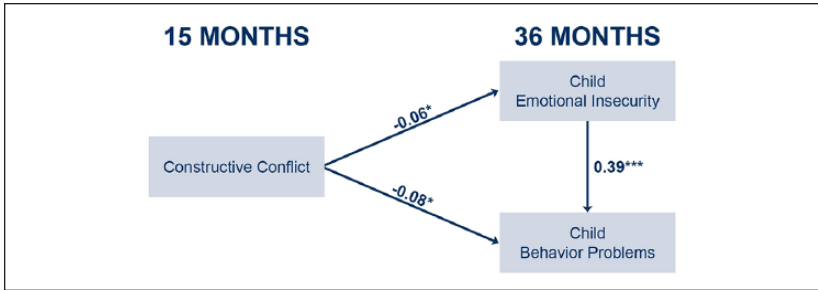


Figure 2. Path model examining constructive conflict at 15 months as a predictor of child emotional insecurity and child behavior problems at 36 months.

Parameter estimates are standardized path coefficients. Study variables were regressed on a full set of control variables, including couple’s ethnicity and race, couple’s education, couple’s number of biological children, couple’s marital status, mother’s age, mother’s depressive symptoms, and child’s gender. $\chi^2(4) = 9.41, p < 0.05, RMSEA = 0.03, 90\% CI = [0.00, 0.06], CFI = 0.99.$

* $p < 0.05.$ ** $p < 0.01.$ *** $p < 0.001.$

behavior problems, $\beta = -0.08, p < 0.05, 95\% CI = [-0.14, -0.01].$ This is consistent with our second hypothesis that constructive conflict would be associated with decreased levels of child behavior problems (H2). Child emotional insecurity positively and significantly predicted child behavior problems, $\beta = 0.39, p < 0.001, 95\% CI = [0.33, 0.47].$

IPV and Child Outcomes

Next, we examined mothers’ reports of IPV as a predictor of child emotional insecurity and child behavior problems. As shown in Table 2 and Figure 3, structural paths were estimated between (a) IPV and child behavior problems, (b) IPV and child emotional insecurity, and (c) child emotional insecurity and child behavior problems. The estimation for the path model converged normally and the model had good fit, $\chi^2(4) = 9.46, p < 0.05, RMSEA = 0.03, 90\% CI = [0.00, 0.06], CFI = 0.99.$ IPV at T1 significantly predicted child emotional insecurity at T2 in that presence of IPV was associated with more child emotional insecurity, $\beta = 0.10, p < 0.001, 95\% CI = [0.05, 0.16].$ IPV at T1 did not significantly predict child behavior problems at T2, $\beta = 0.03, p = 0.287, 95\% CI = [-0.02, 0.08].$ Child emotional insecurity positively and significantly predicted child behavior problems, $\beta = 0.39, p < 0.001, 95\% CI = [0.33, 0.45].$ Overall, we did not find support for the fourth hypothesis (H4) that IPV and destructive conflict would have distinct associations with child

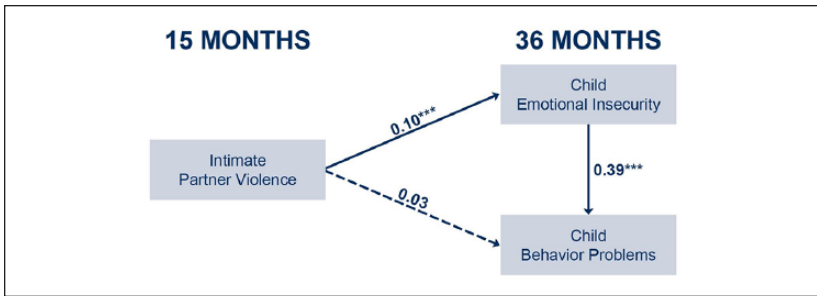


Figure 3. Path model examining intimate partner violence at 15 months as a predictor of child emotional insecurity and child behavior problems at 36 months. Parameter estimates are standardized path coefficients. Study variables were regressed on a full set of control variables, including couple's ethnicity and race, couple's education, couple's number of biological children, couple's marital status, mother's age, mother's depressive symptoms, and child's gender. Dotted line indicates a nonsignificant path. $\chi^2(4) = 9.46, p < 0.05$, RMSEA = 0.03, 90% CI = [0.00, 0.06], CFI = 0.99. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

behavior problems in that the effect size for IPV on child behavior problems would be greater than that of destructive conflict on child behavior problems. Contrary to our hypothesis, the effect size for IPV on child behavior problems ($\beta = 0.03$) was less than that of destructive conflict on child behavior problems ($\beta = 0.14$).

Bootstrapping Analyses: Further Testing the Mediating Role of Child Emotional Insecurity

We used bootstrapping analyses to estimate the confidence interval (CI) of the indirect effect of interparental conflict on child behavior problems through the mediating variable, child emotional insecurity. Bootstrapping analysis involves directly testing the indirect effect by estimating the CI of the indirect effect (Dearing & Hamilton, 2006). Using the analytic sample, observations were drawn randomly with the replacement to create additional data sets. Next, indirect effects and CIs were calculated for each data set. When the CI does not contain zero, the indirect effect is considered statistically significant (Dearing & Hamilton, 2006). The CIs of the indirect effects of constructive conflict, destructive conflict, and IPV at T1 on child behavior problems at T2 based on 500 bootstrap samples indicated statistically significant indirect effects: constructive conflict, 95% CI = [-0.02, -0.0002]; destructive conflict, 95% CI = [0.02, 0.03]; and IPV, 95% CI = [0.01, 0.04]. These results indicated that, although the indirect effects are small, child

emotional insecurity is a mediator between constructive conflict and child behavior problems, destructive conflict and child behavior problems, and IPV and child behavior problems.

Discussion

Although it is well established that high levels of interparental conflict are associated with child behavior problems (Cummings & Davies, 2010; Grych & Fincham, 2001), less is known about the mechanisms underlying such associations, especially among children in “fragile families” with high levels of socioeconomic disadvantage and parental relationship instability. The current study examined processes linking constructive conflict, destructive conflict, and IPV with young children’s behavior problems, with children’s emotional insecurity as a mediator, using a large and diverse sample of low-income, unmarried couple families. We found support for the first three of our hypotheses. Consistent with the first hypothesis (H1), maternal report of destructive conflict was associated with higher levels of child behavior problems. Consistent with the second hypothesis (H2), maternal report of constructive conflict was associated with lower levels of child behavior problems. Consistent with the third hypothesis (H3), child emotional insecurity mediated the link between destructive conflict and child behavior problems. Child emotional insecurity also mediated the links between constructive conflict and child behavior problems, as well as IPV and child behavior problems. Contrary to our fourth hypothesis (H4), the effect size for IPV on child behavior problems was less than that of destructive conflict on child behavior problems. Furthermore, IPV did not significantly predict child behavior problems.

The links between destructive conflict, child emotional insecurity, and child behavior problems are consistent with the tenants of EST and EST-R (Davies & Cummings, 1994; Davies & Martin, 2013), as well as findings from prior research (Cummings et al., 2004; Kopystynska et al., 2017; Roopnarine & Dede Yildirim, 2018). More destructive conflict directly predicted increased levels of child behavior problems, as well as indirectly predicted increased levels of child behavior problems via increased levels of child emotional insecurity although the magnitude of the indirect effect was small. The links between constructive conflict, child emotional insecurity, and child behavior problems support prior arguments that constructive conflict is associated with reduced child emotional insecurity and child behavior problems (Cummings et al., 2003; Easterbrooks et al., 1994), as well as research showing that constructive conflict is linked with increased child emotional security (McCoy et al., 2009) and decreased child behavior problems (Davies et al., 2012, Study 2). More constructive conflict directly predicted decreased levels of child

behavior problems, as well as indirectly predicted decreased levels of child behavior problems via decreased levels of child emotional insecurity. Although the magnitude of the indirect effect was small, our finding makes an important contribution to the literature given the relatively little empirical evidence on the role of constructive conflict in young children's socioemotional and behavioral outcomes, especially in poor families.

Surprisingly, the effect size for IPV on child behavior problems was less than that of destructive conflict on child behavior problems. Moreover, there was no direct association between IPV and child behavior problems although there was a small indirect effect of IPV on child behavior problems. This is consistent with El-Sheikh et al.'s (2008) findings that IPV did not have a direct link with child behavior problems but an indirect link via child emotional insecurity in a community-based sample of families. In this study, effects of IPV were indirect; IPV was associated with increased levels of children's emotional insecurity, which in turn was linked to increased levels of child behavior problems. That said, our IPV findings should be viewed in light of the large body of literature that has demonstrated a clear link between IPV and child behavior problems (for reviews, see Evans, Davies, & DiLillo, 2008; Vu, Jouriles, McDonald, & Rosenfield, 2016). One plausible explanation for why we do not see a direct link between IPV and child behavior problems is that serious forms of conflict such as IPV are relatively rare, whereas moderate interparental conflict may be more commonly experienced in highly stressed families, perhaps even occurring daily. Thus, children may be exposed more frequently to destructive conflict behaviors than they are to physical or sexual IPV. Furthermore, prior meta-analyses (e.g., Jouriles et al., 2016) have included a substantial number of studies in which IPV and destructive conflict were treated as a single construct. The effects of IPV on child behavior problems could be, in part, attributed to destructive conflict. More research on the unique roles of IPV and destructive conflict on child behavior problems in different populations is warranted.

Although not the main focus of the current study, we found that maternal depressive symptoms consistently predicted child emotional insecurity and child behavior problems in all three models. Higher levels of maternal depressive symptoms were associated with increased levels of both child outcomes. This is consistent with prior research demonstrating that maternal depressive symptoms serve as risk factors for increased child emotional insecurity (Kouros, Merrilees, & Cummings, 2008) and child behavior problems (Lee, Pace, Lee, & Knauer, 2018). Maternal depression seems to play a unique role in young children's socioemotional and behavioral development in that maternal depression can threaten young children's sense of emotional security about the interparental relationship, which in turn, has implications for children's adjustment and functioning.

Limitations

There are several limitations to the current study. First, the study used a half-longitudinal design because measures of child emotional insecurity and child behavior problems were only available at a single time point. Researchers have shown that mediation analysis can yield biased results when using cross-sectional data (Maxwell & Cole, 2007). Second, the study relied on mothers' reports, which may have introduced shared method bias and inflated the associations between interparental conflict and child outcomes. Third, although psychological aggression is a core component of IPV, we could not distinguish this form of IPV from destructive conflict because the BSF data set did not include CTS2's psychological aggression subscale. Nevertheless, items from the destructive conflict measure seem to overlap with those from CTS2's psychological aggression subscale. Fourth, the current study was not able to include different forms of family violence (e.g., child maltreatment) that are known to commonly cooccur with IPV (Moylan et al., 2010) given the lack of such measures in the BSF data set. Fifth, BSF measurements of interparental conflict—constructive conflict in particular—may not adequately capture aspects of conflict theorized by the EST and EST-R, thus contributing to the small magnitude of the indirect effects, especially the indirect effect of constructive conflict on child behavior problems. Finally, the BSF sample consisted primarily of unmarried couples with young children who were highly disadvantaged. Our results may be most relevant to parents in similar circumstances and not generalizable to all parents.

Research and Clinical Implications

Overall, our findings are relevant to a sizable segment of the U.S. population of parents. Nonmarital births accounted for 40.3% of all births in 2015 (Martin, Hamilton, Osterman, Driscoll, & Matthews, 2017). Studies using samples of socioeconomically disadvantaged, unmarried couple families are relevant to an important part of the American landscape. Future research should use longitudinal data, fathers' reports of interparental conflict, dimensions of IPV that reflect psychological aggression, and other forms of cooccurring family violence when examining the mechanisms underlying the links between different interparental conflict and child outcomes. With respect to clinical implications, our findings suggest that one way to reduce children's emotional insecurity in the interparental relationship is for parents to use constructive conflict tactics in times of disagreement, as well as minimize children's exposure to destructive conflict and IPV. Our study suggests that low-income, unmarried parents may benefit from early parent education highlighting the consequences of different interparental conflict

on child well-being and functioning. Interventions to help parents tune into and develop awareness of their children's sense of emotional security may also be needed.

Declaration of Conflicting Interests

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Ethical Approval

This study was approved as secondary data analysis by the institutional review board at the University of Michigan. Project name: Building Strong Families; approval number: HUM00084971.

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References

- Achenbach, T. M. (1991). *Integrative guide for the 1991 CBCL/4-18, YSR, and TRF profiles*. Burlington, NJ: University of Vermont, Department of Psychiatry.
- Allison, P. D. (2003). Missing data techniques for structural equation modeling. *Journal of Abnormal Psychology, 112*, 545-557.
- Beck, D. T. (1999). Maternal depression and child behaviour problems: A meta-analysis. *Journal of Advanced Nursing, 29*, 623-629. doi:10.1046/j.1365-2648.1999.00943.x

- Beyer, K., Wallis, A. B., & Hamberger, L. K. (2015). Neighborhood environment and intimate partner violence: A systematic review. *Trauma, Violence, & Abuse, 16*, 16-47.
- Bowlby, J. (1969). *Attachment and loss: Vol. I. Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy development*. New York, NY: Basic Books.
- Brock, R. L., & Kochanska, G. (2016). Interparental conflict, children's security with parents, and long-term risk of internalizing problems: A longitudinal study from ages 2 to 10. *Development and Psychopathology, 28*, 45-54. doi:10.1017/S0954579415000279
- Brown, S. L. (2010). Marriage and child well-being: Research and policy perspectives. *Journal of Marriage and Family, 72*, 1059-1077. doi:10.1111/j.1741-3737.2010.00750.x
- Cheung, R. Y. M., Cummings, E. M., Zhang, Z., & Davies, P. T. (2016). Trivariate modeling of interparental conflict and adolescent emotional security: An examination of mother-father-child dynamics. *Journal of Youth and Adolescence, 45*, 2336-2352. doi:10.1007/s10964-015-0406-x
- Clements, M. L., Martin, S. E., Randall, D. W., & Kane, K. L. (2014). Child and parent perceptions of interparental relationship conflict predict preschool children's adjustment. *Couple & Family Psychology: Research & Practice, 3*, 110-125.
- Coe, J. L., Davies, P. T., & Sturge-Apple, M. L. (2017). The multivariate roles of family instability and interparental conflict in predicting children's representation of insecurity in the family system and early school adjustment problems. *Journal of Abnormal Child Psychology, 45*, 211-224. doi:10.1007/s10802-016-0164-6
- Cummings, E. M., & Davies, P. T. (1996). Emotional security as a regulatory process in normal development and the development of psychopathology. *Development and Psychopathology, 8*, 123-139. doi:10.1017/S0954579400007008
- Cummings, E. M., & Davies, P. T. (2010). *Marital conflict and children: An emotional security perspective*. New York, NY: Guilford Press.
- Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2003). Children's responses to everyday marital conflict tactics in the home. *Child Development, 74*, 1918-1929.
- Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2004). Everyday marital conflict and child aggression. *Journal of Abnormal Child Psychology, 32*, 191-202.
- Cunradi, C. B., Caetano, R., Clark, C., & Schafer, J. (2000). Neighborhood poverty as a predictor of intimate partner violence among White, Black, and Hispanic couples in the United States: A multilevel analysis. *Annals of Epidemiology, 10*, 297-308.
- Davies, P. T., & Cummings, E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin, 116*, 387-411.
- Davies, P. T., Forman, E. M., Rasi, J. A., & Stevens, K. I. (2002). Assessing children's emotional security in the interparental relationship: The security in the interparental subsystem scales. *Child Development, 73*, 544-562.

- Davies, P. T., & Martin, M. (2013). The reformulation of emotional security theory: The role of children's social defense in developmental psychopathology. *Developmental Psychopathology*, 25, 1435-1454. doi:10.1017/S0954579413000709
- Davies, P. T., & Martin, M. (2014). Children's coping and adjustment in high-conflict homes: The reformulation of emotional security theory. *Child Development Perspectives*, 8, 242-249. doi:10.1111/cdep.12094
- Davies, P. T., Martin, M. J., & Cicchetti, D. (2012). Delineating the sequelae of destructive and constructive interparental conflict for children with an evolutionary framework. *Developmental Psychology*, 48, 939-955. doi:10.1037/a0025899
- Davies, P. T., & Sturge-Apple, M. L. (2007). Advances in the formulation of emotional security theory: An ethologically-based perspective. *Advances in Child Behavior and Development*, 35, 87-137.
- Dearing, E., & Hamilton, L. C. (2006). Contemporary advances and classic advice for analyzing mediating and moderating variables. *Monographs of the Society for Research in Child Development*, 71, 88-104.
- Easterbrooks, M. A., Cummings, E. M., & Emde, R. N. (1994). Young children's response to constructive marital disputes. *Journal of Family Psychology*, 8, 160-169.
- El-Sheikh, M., Cummings, E. M., Kouros, C. D., Elmore-Staton, L., & Buckhalt, J. (2008). Marital psychological and physical aggression and children's mental and physical health: Direct, mediated, and moderated effects. *Journal of Consulting and Clinical Psychology*, 76, 138-148. doi:10.1037/0022-006X.76.1.138
- 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.
- Finkelhor, D., Turner, H., Shattuck, A., & Hamby, S. L. (2015). Prevalence of childhood exposure to violence, crime, and abuse: Results from the national survey of children's exposure to violence. *Journal of the American Medical Association Pediatrics*, 169, 746-754. doi:10.1001/jamapediatrics.2015.0676
- Goeke-Morey, M. C., Cummings, E. M., & Papp, L. M. (2007). Children and marital conflict resolution: Implications for emotional security and adjustment. *Journal of Family Psychology*, 21, 744-753. doi:10.1037/0893-3200.21.4.744
- Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Lawrence Erlbaum.
- Grych, J. H., & Fincham, F. D. (2001). *Interparental conflict and child development: Theory, research, and application*. Cambridge, UK: Cambridge University Press.
- Harlow, H. F. (1959). Affectional response in the infant monkey. *Science*, 130, 421-432.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. doi:10.1080/1070519909540118
- Jouriles, E. N., McDonald, R., Vu, N. L., & Sargent, K. S. (2016). Children's exposure to intimate partner violence: Should sexual coercion be considered? *Journal of Family Psychology*, 30, 503-508. doi:10.1037/fam0000146

- Katz, L. F., & Woodin, E. M. (2002). Hostility, hostile detachment, and conflict engagement in marriages: Effects on child and family functioning. *Child Development, 73*, 636-652.
- Kenny, D. A. (2015). *Measuring model fit*. Retrieved from <http://davidakenny.net/cm/fit.htm>
- Kopystynska, O., Paschall, K. W., Barnett, M. A., & Curran, M. A. (2017). Patterns of interparental conflict, parenting, and child emotional insecurity: A person-centered approach. *Journal of Family Psychology, 31*, 922-932. doi:10.1037/fam0000343
- Kouros, C. D., Merrilees, C. E., & Cummings, E. M. (2008). Marital conflict and children's emotional security in the context of parental depression. *Journal of Marriage and Family, 70*, 684-697.
- Lee, S. J., Pace, G. T., Lee, J. Y., & Knauer, H. (2018). The associations of fathers' parental warmth and parenting stress to child behavior problems. *Children and Youth Services Review, 91*, 1-10. doi:10.1016/j.childyouth.2018.05.020
- Martin, J. A., Hamilton, B. E., Osterman, M. J. K., Driscoll, A. K., & Matthews, T. J. (2017). Births: Final data for 2015. *National Vital Statistics Reports, 66*(1), 1-70.
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods, 12*, 23-44. doi:10.1037/1082-989X.12.1.23
- McCoy, K., Cummings, E. M., & Davies, P. T. (2009). Constructive and destructive marital conflict, emotional security and children's prosocial behavior. *Journal of Child Psychology and Psychiatry, 50*, 270-279. doi:10.1111/j.1469-7610.2008.01945.x
- Moore, Q., Sun, X., Wood, R. G., Clarkwest, A., Killewald, A., & Monahan, S. (2013). *Restricted data files documentation report*. Princeton, NJ: Mathematica Policy Research.
- Moore, Q., Wood, R. G., Clarkwest, A., Killewald, A., & Monahan, S. (2012). *The long-term effects of Building Strong Families: A relationship skills education program for unmarried parents* (Technical supplement). Princeton, NJ: Mathematica Policy Research.
- Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence, 25*, 53-63.
- Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and the Family, 48*, 295-307.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Roopnarine, J. L., & Dede Yildirim, E. (2018). Influence of relationship skills education on pathways of associations between paternal depressive symptoms and IPV and childhood behaviors. *Psychology of Men & Masculinity, 19*(2), 223-233. doi:10.1037/men0000100
- StataCorp. (2015). *Stata statistical software: Release 14*. College Station, TX: StataCorp LP.
- Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D. (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression and Violent Behavior, 10*, 65-98. doi:10.1016/j.avb.2003.09.001

- Straus, M. A. (2004). *Scoring the CTS2 and CTSPC*. Durham: University of New Hampshire.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scale (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283-316.
- Symes, L., Maddoux, J., McFarlane, J., Nava, A., & Gilroy, H. (2014). Physical and sexual intimate partner violence, women's health and children's behavioural functioning: Entry analysis of a seven-year prospective study. *Journal of Clinical Nursing, 23*, 2909-2918.
- U.S. Department of Education. (2008). *What works clearinghouse procedures and standards handbook*. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v3_0_standards_handbook.pdf
- Vu, N. L., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2016). Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. *Clinical Psychology Review, 46*, 25-33. doi:10.1016/j.cpr.2016.04.003
- Wood, R. G., Moore, Q., Clarkwest, A., Hsueh, J., & McConnell, S. (2010). *Strengthening unmarried parents' relationships: The early impacts of Building Strong Families* (Technical supplement). Princeton, NJ: Mathematica Policy Research.
- Wood, R. G., Moore, Q., Clarkwest, A., Killewald, A., & Monahan, S. (2012). *The long-term effects of Building Strong Families: A relationship skills education program for unmarried parents* (Final report). Princeton, NJ: Mathematica Policy Research.

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