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# Constructive and destructive marital conflict, emotional security and children's prosocial behavior

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#### Abstract

**Background**—This study addresses the gaps in understanding the relationship between constructive and destructive marital conflict and children's prosocial behavior from a process-oriented perspective.

**Method**—Data were drawn from a three-wave study of 235 families with children ages 5–7 at wave 1. Relations between constructive and destructive marital conflict, children's emotional security, warm parenting and children's prosocial behavior were examined through the use of structural equation modeling.

**Results**—Even after controlling for prior levels of children's prosocial behavior at wave 1, children's emotional security acted as an intervening variable between both constructive and destructive marital conflict and children's prosocial behavior over time.

**Conclusions**—These findings advance the relationship between marital conflict and children's adjustment by focusing on children's prosocial behavior and highlight the need to further investigate the impact of positive dimensions of marital conflict on dimensions of children's positive social functioning.

#### Keywords

Marital disharmony; prosocial behavior; parent-child relationships; emotion regulation; social behavior

In every marriage, conflict is unavoidable. Yet, when children are faced with destructive conflict, they are at risk for developing adjustment problems. Aggression, delinquency, and conduct disorders are commonly seen externalizing disorders, whereas anxiety, depression, and withdrawal are types of internalizing disorders that are associated with marital conflict (Emery, 1982; Grych & Fincham, 1990). The connection between marital conflict and children's behavioral and emotional difficulties is well documented.

Specific conflict tactics have been explored towards understanding more specifically how marital conflict impacts children. When both the frequency and intensity of parental arguments are studied, *how* the disputes are handled, rather than the frequency, matters most (Goodman, Barfoot, Frye, & Belli, 1999). According to the emotional security theory (EST), children have a higher-order goal of wanting to feel safe and secure in their family (Davies & Cummings, 1994). Marital conflict which threatens that goal has a different effect than

marital conflict not threatening emotional security. With regard to this issue, marital conflict has recently been classified into two categories: constructive and destructive.

When parents handle conflicts in positive ways by displaying behaviors, such as verbal and physical affection, problem solving and support, the conflict is said to be constructive (Goeke-Morey, Cummings, Harold, & Shelton, 2003). This type of conflict helps preserve children's security by increasing their confidence that any difficulties between their parents will be managed in a way that maintains family harmony. Children are less likely to regulate their exposure to this type of conflict situation by intervening or getting directly involved in the dispute (Cummings & Davies, 1996). Constructive conflict also reduces the probability of children having aggressive tendencies (Cummings, Goeke-Morey, & Papp, 2004) and may aid children in the development of their own problem solving, coping, and conflict resolution abilities (Grych & Fincham, 1990). At the same time, the relationship between constructive conflict and children's positive social functioning remains scarce in the literature.

Conflicts that are hostile, angry and contain conflict tactics, such as physical aggression, verbal aggression, threat, and personal insult, can be described as destructive. Children's emotional security becomes disrupted when they witness this type of conflict, because their internal goals about their family are disrupted and are more likely to become emotionally distraught. After witnessing a destructive conflict, children may experience elevated worry, anxiety, and hopelessness, putting them at risk for internalizing disorders, or children may act out in an aggressive manner, due to feelings of anger and lack of control, which increases their risk for externalizing disorders (Cummings & Davies, 1994; Grych & Fincham, 1993). Therefore, one can see that destructive conflict increases children's risk for adjustment disorders, whereas constructive conflict may reduce it. Despite the differential effects that constructive and destructive conflict and their developmental implications for children's social adjustment is still lacking in the literature. Accordingly, the aim of this study is to examine constructive and destructive marital conflict as predictors of a relatively under-studied outcome: children's prosocial behavior

Reflecting the clinical implications that emotional and behavioral problems have for diagnosis and treatment, research has predominately focused on these specific child outcomes (Davies & Cummings, 1994; Grych & Fincham, 1990). Although substantively relevant work is emerging on other domains of child outcomes, such as attachment (Frosch, Mangelsdorf, & McHale, 2000), dating relationships (Kinsfogel & Grych, 2004), and mental representations of family (Grych, Wachsmuth-Schlaefer, & Klockow, 2002), research on children's prosocial behavior tends to be overlooked. Children's prosocial behavior includes cooperation, sharing, empathy, and being considerate and is viewed as defining features of social competence (Ladd & Profilet, 1996). Children's prosocial behavior has been studied as a child development outcome in relation to family stress, including psychological development (Ladd, Birch, & Buhs, 1999), emotional regulation (Eisenberg et al., 1996) and lower externalizing problems (Hay & Pawlby, 2003). More research is needed on the influences on the development of prosocial behavior, including the impact of marital conflict.

Although the research pertaining to marital conflict styles and prosocial behaviors is sparse, some studies have looked at the direct and indirect associations between marital conflict and children's global social functioning, supporting the promise of further study. When children from low conflict families are compared to children from high conflict families, a distinct difference is found between the children's friendship qualities and how they interact with their peers. Specifically, exposure to more negative interparental conflict increases the

likelihood that children will be more aggressive (Katz & Low, 2004) and have trouble interacting with their peers (Vandewater & Lansford, 1998). Destructive marital conflict also increases the probability that children will have lower social competence and problem solving abilities (Lindsey, Colwell, Frabutt, & MacKinnon-Lewis, 2006).

Furthermore, not all of the effects of marital conflict on children's social functioning are negative. Some effects actually positively influence children. Having a supportive interparental relationship provides children with a sense of security in their family relationships. This secure feeling encourages children to feel confident and capable of forming peer relationships (Markiewicz, Doyle, & Brendgen, 2001), and thus have a higher friendship quality (Lindsey et al., 2006). In particular, use of constructive behaviors, such as conflict resolution, reasoning, and problem solving skills by parents, helps children develop problem solving and coping skills of their own (Goodman et al., 1999). All of these findings indicate that marital conflict, both constructive and destructive, influences children's social functioning, which makes further study of children's prosocial behavior promising.

Moreover, recent literature has highlighted the need to go beyond simply documenting links between marital conflict and child outcomes (Cummings & Davies, 2002). Research supports a process oriented approach, in order to understand the mechanisms by which children's development takes place. Cognitive appraisals (Grych, Harold, & Miles, 2003), affect regulation (Cummings, Goeke-Morey, & Papp, 2003) and coping behaviors (Kerig, 2001) have been investigated as relevant to understanding pathways by which marital conflict impacts children's development. Further positioning this paper in the broader literature, these intrapersonal processes all related to the conceptualization of children's emotional security (Davies, Forman, Rasi, & Stevens, 2002a). For example, children may exhibit negative emotional reactivity or behavioral dysregulation, which are indicative of emotional insecurity in children, when faced with destructive marital conflict, whereas constructive conflict has been related to children displaying positive emotionality (e.g., happiness) (Cummings et al., 2003). Furthermore, children's emotional security has been shown to act as a mediator between marital conflict and child maladjustment (Cummings, Schermerhorn, Davies, Goeke-Morey, & Cummings, 2006; Davies, Harold, Goeke-Morey, & Cummings, 2002b; Harold, Shelton, Goeke-Morey, & Cummings, 2004), as well as sleep, academic achievement and health-related outcomes (El-Sheikh, Buckhalt, Cummings, & Keller, 2007a; El-Sheikh, Buckhalt, Keller, Cummings, & Acebo, 2007b). At the same time, emotional security has not been explored as a link to positive child outcomes, such as children's prosocial behavior.

In addition, parenting has been proposed as a pathway as to how marital conflict is linked to child adjustment. In particular, parenting is a commonly studied intervening variable that indirectly links marital conflict to children's social adjustment (Parke et al., 2001). Destructive marital conflict is linked to difficulties in the parent–child relationship, with the spillover hypothesis positing that experiences in the marital relationship spill over into the parent–child relationship (Erel & Burman, 1995). As a result of the spillover of negativity from the marital relationship to the parent–child relationship, children's adjustment is adversely affected (Katz & Woodin, 2002). Yet, on an encouraging note, parents who have constructive couple interactions are more likely to engage in effective parenting practices (e.g., positive emotions, consistent discipline), which are positively associated with children's development (Cowan & Cowan, 2004). Since this study focuses on detecting positive developmental outcomes, warm parenting was chosen as the parenting measure, in order to increase sensitivity to possible pathways from constructive conflict to positive development, as well as pathways that may buffer against negative stressors, such as destructive marital conflict.

Although studies have examined both parenting and emotional security as mediators of links between marital conflict and children's adjustment, few studies have at the same time examined the impact of processes implicated in direct (i.e., emotional security) and indirect (i.e., parenting) effects of marital conflict on positive dimensions of children's functioning, in particular their prosocial behavior. This study provides exploration of both children's emotional security and warm parenting as explanatory mechanisms by which marital conflict impacts children's prosocial behavior. In addition, little research has examined both constructive and destructive marital conflict to explore the differential impact that conflict styles may have on children. The present study incorporates both types of marital conflict to explore the differential impact that those factors may have on children's development. The central hypothesis of this study is that warm parenting and children's emotional security will contribute to the explanation of the impact of both constructive and destructive marital conflict on children's social behaviors throughout development.

#### **Methods**

#### **Participants**

Participants were 235 families, recruited from the South Bend, IN and Rochester, NY communities and their surrounding areas. Families were recruited using flyers, postcards, and several local community agencies, such as daycares and booths at local community events. Families were eligible to participate if they fit the following criteria: were two parent families who had been living together for at least 3 years at the time of recruitment and had at least one child currently enrolled in kindergarten.

Eighty-nine percent of the participants were married. Couples had been living together for an average of 11 years (SD=4.9). The mothers had a mean age of 35 (SD=5.6), and fathers had a mean age of 36.8 (SD=6.2). Children ranged in age from 5–7 (M=6.0, SD=.5), and there were 107 boys and 129 girls. Participants were 77% Caucasian, 16.2% African American, and 6.8% other races. The mean family income was between \$40,000 and \$54,999 a year. Approximately 95% of female participants and 89% of male participants were the child's biological parent. The majority of participants participated in all three waves of data collection which were evenly spaced three years apart, 95% at Time 2 (N=224) and 91% at Time 3 (N=214).

## Measures

**Marital conflict**—At Wave 1, severity and specific types of marital conflict tactics were assessed by the frequency/severity, cooperation, resolution, stonewalling, verbal aggression, and physical aggression subscales from the Conflict and Problem Solving Scales (CPS; Kerig, 1996). Each parent completed the subscales based on their own conflict behaviors. Reliability coefficients for mothers in this sample ranged from .67 to .85 (mean reliability = .75) and for fathers ranged from .68 to .90 (mean reliability = .76) in Wave 1. Mothers' and fathers' scores on these subscales were all significantly correlated: stonewalling r = .42, frequency/severity r = .50, cooperation r = .50, and resolution r = .52.

Mothers and fathers also completed the 10-item O'Leary Porter Scale (OPS; Porter & O'Leary, 1980) to assess children's exposure to hostile conflict. For this sample, reliability coefficients were .80 for mothers and .78 for fathers. Mothers' and fathers' scores had a significant correlation: r = .54.

Observational scales for overall constructiveness and destructiveness were developed, based on observers' assessments of the overall constructiveness and destructiveness of marital conflict during coding periods, including consideration of behaviors such as support,

problem solving, verbal affection, physical affection, verbal aggression, nonverbal anger and withdrawal. Responses were rated every 30 seconds on a scale from 0 (did not occur) to 2 (strongly occurred). Two research assistants were extensively trained on the coding system, and after achieving adequate reliabilities with intraclass coefficients above .6, the research assistants independently coded each interaction. Scores were totaled across both interactions separately for each spouse. Total scores were then averaged across mothers and fathers in order to reduce the number of variables. Cronbach's  $\alpha$  was computed on these marital interaction codes and demonstrated an acceptable level of internal consistency of .79 for overall constructiveness and .88 for overall destructiveness. Mothers' and fathers' scores were significantly associated with one another, overall constructiveness r = .66 and overall destructiveness r = .80.

Cooperation and resolution subscales, and overall constructiveness scores from the observational measure were used as indicators of a latent construct of constructive marital conflict. Stonewalling, frequency/severity, and hostility subscales, and overall destructiveness sores from the observation measure served as indicators of a latent construct of destructive marital conflict. Although the observational measures did not load as highly, the factor loadings were significant, and were retained to create theoretically meaningful constructs of marital conflict that more comprehensively captured the multiple facets of the two types of conflict.

**Warm parenting**—The 20-item Parental Acceptance—Rejection Questionnaire (PARQ; Rohner, 1990) was used to assess parents' use of warmth/accepting parenting behaviors at Wave 2. Parents rate both their own and their spouses' parenting behavior. In order to reduce the data, self-report and spouse's report of his/her spouse were summed together to give one score for the couple's warm parenting. For this sample, reliability coefficients at Time 2 were .95 for mothers and .96 for fathers. The association between mothers' and fathers' scores was r = .72.

As another indicator of parental warmth, parents also reported on their own and their spouse's parenting behaviors on the 6-item positive parenting subscale from the Alabama Parenting Questionnaire (APQ; Shelton, Frick, & Wootton, 1996). For this sample, reliability coefficients for mothers were .79 and for fathers were .78.

Emotional security about marital relations—Mothers and fathers completed the Security in the Marital Subsystem-Parent Report Inventory (SIMS-PR; Davies et al., 2002a) to assess children's emotional security about the marital relationship during year two of the study. Guided by the significance attached to utilizing emotional arousal and dysregulation as central indices of emotional security, we utilized the emotional reactivity (7 items) and behavior dysregulation (5 items) scales from the SIMS-PR. 'Please rate how well "appears frightened" describes your child's reactions to witnessing arguments between you and your partner during the past year' (i.e., emotional reactivity) and 'Please rate how well "yells at family members" describes your child's reactions to witnessing arguments between you and your partner during the past year' (i.e., behavior dysregulation). Reliability coefficients for mothers and fathers on both scales ranged from .70 to .84.

**Children's prosocial behavior**—Mothers, fathers and teachers completed the 7-item prosocial subscale from the Child Behavior Scale at Waves 1 and 3 (CBS; Ladd, & Proflit, 1996). Reliabilities in this sample at Time 1 were .73 for mothers, .72 for fathers and .70 for teachers and at Time 3 were .74 for mothers, .75 for fathers and .79 for teachers. All three reports were used to form a latent construct of children's prosocial behavior. Although the teacher report did not load as highly as mothers' and fathers' report, the factor loadings were

retained to create a theoretically meaningful construct including children's behavior in multiple settings.

#### **Procedure**

Data for this study was collected over three time points (spaced one year apart). The study was conducted under the approval and direction of the Institutional Review Board and both parents and children provided consent and assent, respectively, before participating. Participating parents completed questionnaires about demographic information, marital functioning and other measures. In addition, parents granted permission for the child's teachers to be contacted to complete an additional set of measures. Parents were also asked to engage in two marital interactions lasting 10 minutes each. Parents selected two topics that were hard to handle and then were instructed to discuss each topic for 10 minutes as they would at home and work towards a resolution to the problem.

#### Results

Descriptive statistics as well as intercorrelations between the variables are shown in Table 1. Each time point was spaced equally one year apart. Structural equation modeling was used to examine the relationship between marital conflict, warm parenting, children's emotional security and children's prosocial behavior. Analyses were conducted using AMOS 4.0 (Arbuckle & Wothke, 1999), which is a computer program that uses full information maximum likelihood estimation to handle missing data. Although, traditionally, the  $X^2$  statistic has been used to test whether the proposed models are a good fit for the data, it has been criticized for being biased when working with a larger sample size. Other fit indices are necessary to verify the fit of the proposed models. Specifically, fit indices such as  $X^2$ /df, normed fit index (NFI), comparative fit index (CFI), and the root mean square error of approximation (RMSEA) were also used to verify the model fit (Arbuckle & Wothke, 1999). Values below 2.5 for the  $X^2$ /df are said to indicate a good model fit. Values above .9 indicate a good model fit for both the CFI and NFI. Finally, RMSEA values below.08 provide an acceptable model fit (Arbuckle & Wothke, 1999).

Model testing was then followed by examining the direct relationship between the predictor variables (constructive and destructive marital conflict) and the criterion variable (i.e., prosocial behavior). Although the most ideal model would have tested both constructive and destructive marital conflict at the same time, due to multicollinearity concerns, constructive and destructive marital conflict were examined in separate models. We chose to examine the constructs separately, rather then combining constructive and destructive into one latent construct, because we wanted to explore whether marital conflict can have both positive and negative effects on family functioning. Relatedly, we were interested in whether there may be different pathways by which marital conflict may impact children's development depending on how the conflict was handled. Constructive marital conflict at Time 1 was not related to children's prosocial behavior at Time 3 ( $\beta = .16$ , p > .19), and destructive marital conflict at Time 1 was also not related to children's prosocial behavior at Time 3 ( $\beta = -.10$ , p > .36). Therefore mediation could not be examined as recommended by Baron and Kenny (1986). At the same time, the indirect effect can still be tested even if the direct effect is not present. That is, a significant relationship between the predictor and outcome variable is not required. Specifically, an intervening variable model is supported when the predictor and outcome variables are indirectly related through their mutual relationship with an intervening variable (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

#### Marital conflict and prosocial behavior: emotional security as an intervening variable

Testing the intervening variable models, Time 1 constructive marital conflict was positively related to both children's emotional security ( $\beta$  = .45, p < .01) and couples' warm parenting ( $\beta$  = .33, p < .01) at Time 2. Both children's emotional security ( $\beta$  = .33, p > .05) and couples' warm parenting ( $\beta$  = .33, p > .01) were, in turn, positively related to children's prosocial behavior at Time 3. As for destructive marital conflict, Time 1 destructive marital conflict was negatively related to children's emotional security ( $\beta$  = -.35, p > .01), but was not significantly related to couples' warm parenting.

#### Further tests of the role of emotional security: controlling for autoregressive pathways

To further test these hypotheses, the autoregressive pathway of children's prosocial behavior at Time 1 was included in order to control for prior levels of children's prosocial behavior (see Figure 1). As to be expected, children's prosocial behavior was highly stable, with children's prosocial behavior at Time 1 positively associated with children's prosocial behavior at Time 3. As in the previous model, constructive marital conflict at Time 1 was positively associated with children's emotional security and couple's warm parenting at Time 2. Children's emotional security at Time 2 was, in turn, still positively related to children's prosocial behavior at Time 3, but couple's warm parenting was only marginally related to children's prosocial behavior at Time 3. Controlling for prior levels of children's prosocial behavior, the autoregressive pathway from children's prosocial behavior at Time 1 was included in the model for destructive marital conflict (see Figure 2). Time 1 destructive marital conflict was negatively associated with children's emotional security which was in turn positively associated with children's prosocial behavior.

### Further tests of the role of emotional security: bootstrapping analyses

Bootstrapping analyses were conducted in order to estimate the confidence interval of the indirect effect in order to further assess children's emotional security as a significant intervening variable. Bootstrapping involves directly testing the indirect effect by estimating the confidence interval of the direct effect (Dearing & Hamilton, 2006). Using this particular data set, observations were randomly and repeatedly drawn with replacement to create additional data sets. The indirect effects were then calculated for each of these samples generated by bootstrapping, including confidence intervals for the indirect effects. When the confidence interval does not contain zero, the indirect effect is said to be statistically significant. Due to the particular sample size used in this study (i.e., N < 400), bootstrapping is statistically more powerful than traditional approaches (e.g., Sobel test) for testing indirect effects in developmental processes (Dearing & Hamilton, 2006; MacKinnon, Lockwood, & Williams, 2004). Confidence intervals of the indirect effects of constructive marital conflict at Time 1 on children's prosocial behavior at Time 3 based on 500 bootstrapping samples did not include zero (95% CI: .001 to .030). These results indicated the children's emotional security at Time 2 was a significant intervening variable, even after accounting for prior levels of children's prosocial behavior at Time 1. For destructive marital conflict, confidence intervals of the indirect effects of destructive marital conflict at Time 1 on prosocial behavior at Time 3 based on 500 bootstrapping samples did not include zero (95% CI: -.011 to -.001). These results again indicated that the children's emotional security at Time 2 was a significant intervening variable, even after accounting for prior levels of children's prosocial behavior at Time 1.

#### **Discussion**

Although many studies have examined the link between marital conflict and children's adjustment (Cummings & Davies, 2002), few have incorporated positive dimensions of children's functioning, such as prosocial behavior. Another noteworthy feature of the study

was the distinction between constructive and destructive marital conflict. Using a three-wave longitudinal design, this study supported relations between constructive marital conflict and children's positive social adjustment. In support of a process oriented approach, the results indicated that emotional security was an intervening process linking both forms of marital conflict and prosocial behavior, albeit via distinctively different pathways. While controlling for prosocial behavior at Time 1, constructive and destructive marital conflict were associated with children's emotional security one year later (positively and negatively, respectively), which in turn was associated with children's prosocial behavior one year later.

For the first time in the context of prospective longitudinal model testing, evidence was found for the impact of constructive marital conflict in increasing positive aspects of children's functioning, rather than simply reducing negative responses or risk for adjustment problems. Moreover, ground was also broken in showing that increased emotional security about marital conflict was related to greater prosocial behavior. These results highlight the positive effects that handling conflict well has on children, contributing to a literature predominantly focused on understanding adjustment problems and family disturbances due to destructive marital conflict. This study complements previous research indicating that destructive marital conflict impacts children's maladjustment, with emotional insecurity acting as the intervening variable (e.g., Davies et al., 2002b).

Constructive marital conflict was also positively associated with warm parenting, at least in some models, suggesting that parents who use constructive marital conflict tactics may be more likely to use warm parenting practices. At the same time, these particular results are difficult to interpret conclusively, and could be attributable to other factors such as the personal characteristics of one parent or the other (Davies et al., 2002b). Destructive marital conflict has been associated with a decrease in positive parenting (Erel & Burman, 1995; Grych & Fincham, 1990), but these relations were not found in this study. Among the possible reasons, it may be that other dimensions of parenting, such as harsh discipline or psychological control, are more impacted by destructive marital conflict as opposed to warm parenting. Moreover, from a family systems perspective (e.g., Davies, Cummings, & Winter, 2004), considerable heterogeneity in expressions of parental warmth may occur in high conflict families. In families characterized by high levels of disengagement, interparental conflict may be accompanied by diminished parental warmth. However, the opposite may occur for families who are enmeshed. In these families interparental discord may be accompanied by elevations in parental warmth as parents vie to form alliances and seek unfulfilled intimacy needs in the parent-child subsystem. Thus, the negligible associations between destructive interparental conflict and warm parenting may mask two qualitatively different forms of interrelationships between marital conflict and warm parenting.

Clinical and theoretical implications merit consideration. The fact that constructive conflict had positive associations with children's healthy development has implications for intervention and prevention work. Clinicians can more cogently advise couples to resolve disputes constructively by informing clients of the relationship between healthy conflict and positive development for children. In addition, recommendations of what parents should do, rather than what not to do, may be especially effective. Although the present study for model-testing purposes was based on latent constructs of constructive and destructive conflict, a growing literature supports both categorical and dimensional distinctions between constructive and destructive conflict behaviors and emotions (e.g., Cummings et al., 2002, 2003, 2004; Goeke-Morey et al., 2003). These studies provide research-based information for intervention and prevention approaches. For example, based on this literature, Cummings, Faircloth, Mitchell, Cummings, and Schermerhorn (2008) found in an intervention study that teaching couples specific ways of handling conflict, emphasizing

specific constructive behaviors, improved marital conflict behaviors and positive changes in marital conflict were related to improved child adjustment over time.

These findings also encourage researchers to examine marital conflict as more than a one-dimensional construct and underscore that constructive and destructive marital conflict have differential effects on family processes and child outcomes. Children's prosocial behavior is related to children having lower psychological problems and higher self-esteem. Thus, by increasing children's prosocial behavior their psychological adjustment may be impacted as well, fostering positive development outcomes for children. Constructive conflict is positively related to children's emotional security, with implications for children's psychological outcomes beyond just prosocial behavior. Increasing children's emotional security reduces the likelihood of internalizing and externalizing disorders, and increases the probability of children's healthy development.

One important future direction may be to ascertain whether families use primarily destructive or constructive conflict tactics when engaging in marital conflict. Although recent work suggests that most couples engage in both constructive and destructive marital conflict tactics during everyday conflicts (Cummings et al., 2004), little research has been directed at the relative incidence of these two types of marital conflict in the home. Thus, the question remains to what degree families might be categorized as constructive, destructive or both, and how that categorization would impact children's development.

With regard to theoretical advances, emotional security was further supported as an explanatory model for relations between marital conflict and child outcomes. Social learning theory has also been invoked to explain associations between marital conflict and child adjustment in this literature. Social learning theory is broadly compatible with EST; for example, both emphasize links between exposure to parents' angry behavior and children's adjustment problems. However, modeling explanations are typically invoked post-hoc with regard to relations between marital conflict and child adjustment and studies have been rarely conducted for the explicit purpose of testing social learning processes, especially prospective tests of meditational pathways. Moreover, in testing a series of contrasting hypotheses derived from EST and modeling theory, Davies et al. (2002b) found that children's reactions to marital conflict more closely fit the predictions of EST than modeling hypotheses. For example, behavioral responses were more consistent with children's concerns about regulating exposure to marital conflict, as predicted by EST, than with notions of modeling adult aggressive behaviors derived from social learning theory. At the same time, given the merits of these approaches within clinically-oriented and child development traditions, an intriguing goal for the future is an integration of these perspectives with a broader theoretical model.

Limitations of this study merit consideration. None of the questionnaire measures included child report. Having children report on parenting practices, in particular, is important since parents and children may differ in their perceptions of parenting practices. Parents reported on the major variables, raising the possibility of common source variance, although observational measures of marital conflict, as well as teacher reports on children's prosocial behavior, were also included. It was not possible for statistical reasons to compare constructive and destructive conflict as predictors in the same model. At the same time, for conceptual reasons, we were specifically interested in constructive conflict as a predictor, distinct from destructive conflict, justifying the separate examination of these constructs as distinct predictors.

Despite these several limitations, these findings help to advance our understanding of the relationship between marital conflict and children's overall development, including positive

social functioning, using prospective multi-method tests. Findings highlight the need to examine children's positive adjustment, as well as constructive dimensions of marital conflict. Both of these elements have been neglected, especially in the context of longitudinal model testing. This study further supports using a process-oriented approach when examining children's development, reflected in results indicating that emotional security was a significant intervening variable connecting marital conflict to children's prosocial behavior.

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#### References

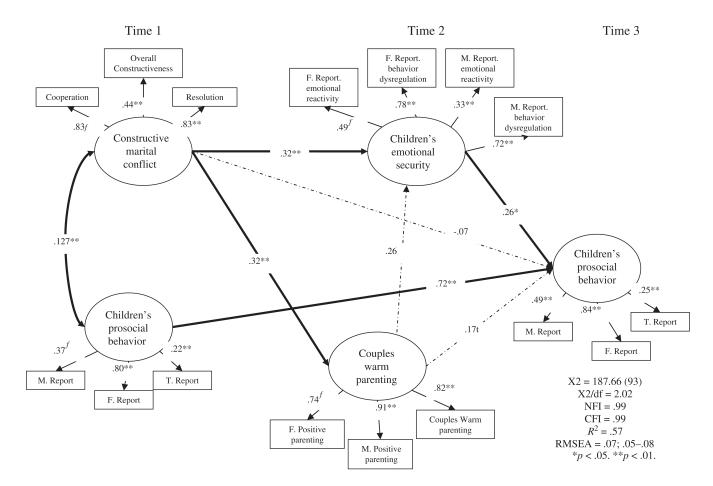
- Arbuckle, JL.; Wothke, W. Amos 4.0 User's Guide. Chicago, IL: Small Waters Cooperation; 1999.
- Baron RM, Kenny DA. The moderator– mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology 1986;51:1173–1182. [PubMed: 3806354]
- Cowan, PA.; Cowan, CP. From family relationships to peer rejection to antisocial behavior in middle childhood. In: Kupersmidt, JS.; Dodge, KA., editors. Children's peer relations: From development to intervention. Washington, DC: American Psychological Association; 2004. p. 159-177.
- Cummings, EM.; Davies, P. Children and marital conflict: The impact of family dispute and resolution. New York: Guilford Press; 1994.
- Cummings EM, Davies PT. Emotional security as a regulatory process in normal development and the development of psychopathology. Development and Psychopathology 1996;8:123–139.
- Cummings EM, Davies PT. Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. Journal of Child Psychology and Psychiatry 2002;43:31–63. [PubMed: 11848336]
- Cummings EM, Faircloth BF, Mitchell PM, Cummings JS, Schermerhorn AC. Evaluating a brief prevention program for improving marital conflict in community families. Journal of Family Psychology 2008;22:193–202. [PubMed: 18410206]
- Cummings EM, Goeke-Morey MC, Papp LM. Children's responses to everyday marital conflict tactics in the home. Child Development 2003;74:1918–1929. [PubMed: 14669904]
- Cummings EM, Goeke-Morey MC, Papp LM. Everyday marital conflict and child aggression. Journal of Abnormal Child Psychology 2004;32:191–202. [PubMed: 15164860]
- Cummings EM, Goeke-Morey MC, Papp LM, Dukewich TL. Children's responses to mothers' and fathers' emotionality and tactics in marital conflict in the home. Journal of Family Psychology 2002;16:278–492.
- Cummings EM, Schermerhorn AC, Davies PT, Goeke-Morey MC, Cummings JS. Interparental discord and child adjustment: Prospective investigations of emotional security as an explanatory mechanism. Child Development 2006;77:132–152. [PubMed: 16460530]
- Davies P, Cummings EM. Marital conflict and child adjustment: An emotional security hypothesis. Psychological Bulletin 1994;116:387–411. [PubMed: 7809306]
- Davies PT, Cummings EM, Winter MA. Pathways between profiles of family functioning, child security in the interparental system, and child psychological problems. Development and Psychopathology 2004;16:525–550. [PubMed: 15605624]
- Davies PT, Forman EM, Rasi JA, Stevens K. Assessing children's emotional security in the interparental relationship: The Security in the Interparental Subsystem Scales. Child Development 2002a;73:544–562. [PubMed: 11949908]
- Davies PT, Harold GT, Goeke-Morey MC, Cummings EM. Child emotional security and interparental conflict. Monographs of the Society for Research in Child Development 2002b;67:27–62.

Dearing E, Hamilton LC. Contemporary advances and classic advice for analyzing mediating and moderating variables. Monographs of the Society for Research in Child Development 2006;71:88–104.

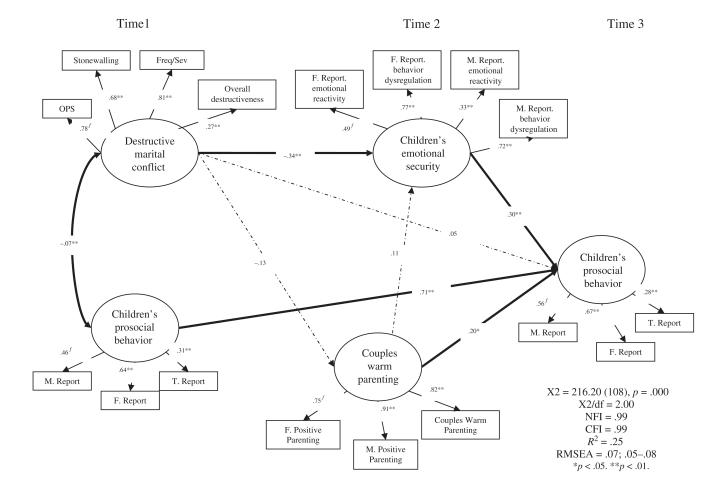
- Eisenberg N, Fabes RA, Karbon M, Murphy BC, Woskinski M, Polzzi L, et al. The relations of children's dispositional prosocial behavior to emotionality, regulation, and social functioning. Child Development 1996;67:974–992. [PubMed: 8706539]
- El-Sheikh M, Buckhalt JA, Cummings EM, Keller P. Sleep disruptions and emotional insecurity are pathways of risk for children. Journal of Child Psychology and Psychiatry 2007a;48:29–96.
- El-Sheikh M, Buckhalt JA, Keller PS, Cummings EM, Acebo C. Child emotional insecurity and academic achievement: The role of sleep disruptions. Journal of Family Psychology 2007b;21:29–38. [PubMed: 17371107]
- Emery RE. Interparental conflict and the children of discord and divorce. Psychological Bulletin 1982;92:310–330. [PubMed: 7146231]
- Erel O, Burman B. Interrelatedness of marital relations and parent–child relations: A meta-analytic review. Psychological Bulletin 1995;118:108–132. [PubMed: 7644602]
- Frosch CA, Mangelsdorf SC, McHale JL. Marital behavior and the security of preschooler– parent attachment relationships. Journal of Family Psychology 2000;14:114–161.
- Goeke-Morey MC, Cummings EM, Harold GT, Shelton KH. Categories and continua of destructive and constructive marital conflict tactics from the perspective of U.S. and Welsh children. Journal of Family Psychology 2003;17:327–338. [PubMed: 14562457]
- Goodman SH, Barfoot B, Frye AA, Belli AM. Dimensions of marital conflict and children's social problem-solving skills. Journal of Family Psychology 1999;13:33–45.
- Grych JH, Fincham FD. Marital conflict and children's adjustment: A cognitive-contextual framework. Psychological Bulletin 1990;108:267–290. [PubMed: 2236384]
- Grych JH, Fincham FD. Children's appraisals of marital conflict: Initial investigations of the cognitive-contextual framework. Child Development 1993;64:215–230. [PubMed: 8436030]
- Grych JH, Harold GT, Miles CJ. A prospective investigation of appraisals as mediators of the link between interparental conflict and child adjustment. Child Development 2003;74:1176–1193. [PubMed: 12938712]
- Grych JH, Wachsmuth-Schlaefer T, Klockow LL. Interparental aggression and young children's representations of family relationships. Journal of Family Psychology 2002;16:259–272. [PubMed: 12238409]
- Harold GT, Shelton KH, Goeke-Morey MC, Cummings EM. Marital conflict, child emotional security about family relationships and child adjustment. Social Development 2004;13:350–376.
- Hay DF, Pawlby S. rosocial development in relation to children's and mothers' psychological problems. Child Development 2003;74:1314–1327. [PubMed: 14552400]
- Katz LF, Low SB. Marital violence, co-parenting, and family-level processes in relation to children's adjustment. Journal of Family Psychology 2004;18:372–382. [PubMed: 15222844]
- Katz LF, Woodin EM. Hostility, hostile detachment, and conflict engagement in marriages: Effects on child and family functioning. Child Development 2002;73:636–652. [PubMed: 11949913]
- Kerig PK. Assessing the links between interparental conflict and child adjustment: The Conflicts and Problem-Solving Scales. Journal of Family Psychology 1996;10:454–473.
- Kerig, PK. Children's coping with interparental conflict. In: Fincham, FD.; Grych, JH., editors. Interparental conflict and child development: Theory, research and applications. New York: Cambridge University Press; 2001. p. 213-245.
- Kinsfogel KM, Grych JH. Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. Journal of Family Psychology 2004;18:505–515. [PubMed: 15382975]
- Ladd GW, Birch SH, Buhs ES. Children's social and scholastic lives in kindergarten: Related spheres of influence? Child Development 1999;70:1373–1400. [PubMed: 10621962]
- Ladd GW, Profilet SM. The Child Behavior Scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. Developmental Psychology 1996;32:1008–1024.

Lindsey EW, Colwell MJ, Frabutt JM, MacKinnon-Lewis C. Family conflict in divorced and non-divorced families: Possible consequences for boys? Mutual friendship and friendship quality. Journal of Social and Personal Relationships 2006;23:45–63.

- MacKinnon DP, Lockwood CM, Hoffman JM, West SG, Sheets V. A comparison of methods to test mediation and other intervening variable effects. Psychological Methods 2002;7:83–104. [PubMed: 11928892]
- MacKinnon DP, Lockwood CM, Williams J. Confidence limits for the indirect effect: Distribution of the product and resampling methods. Multivariate Behavioral Research 2004;39:99–128. [PubMed: 20157642]
- Markiewicz D, Doyle AB, Brendgen M. The quality of adolescents' friendships: Associations with mothers' interpersonal relationships, attachments to parents and friends, and prosocial behaviors. Journal of Adolescence 2001;24:429–445. [PubMed: 11549324]
- Parke, RD.; Kim, M.; Flyr, M.; McDowell, DJ.; Simpkins, SD.; Killian, CM. Managing marital conflict: Links with children's peer relationships. In: Gyrch, JH.; Fincham, FD., editors. Interparental conflict and child development. New York: Cambridge University Press; 2001. p. 291-314.
- Rohner, RP. Handbook for the study of parental acceptance and rejection. Storrs, CT: Rohner Research; 1990.
- Shelton KK, Frick PJ, Wootton J. Assessment of parenting practices in families of elementary schoolage children. Journal of Clinical Child Psychology 1996;25:317–329.
- Vandewater EA, Lansford JE. Influences of family structure and parental conflict on children's well-being. Family Relations 1998;47:323–330.



**Figure 1.**Comprehensive model examining children's emotional security and couples' positive parenting as intervening variable linking couples' constructive marital conflict to children's prosocial behavior, including the autoregressive pathway of children's prosocial behavior at Time 1



**Figure 2.**Comprehensive model examining children's emotional security and couples' positive parenting as intervening variable linking couples' constructive marital conflict to children's prosocial behavior, including the autoregressive pathway of children's prosocial behavior at Time 1

Intercorrelations among the variables

Table 1

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Variable	1	7	8	4	w	9	7	∞	6	10	11	12	13	14	15	16	17	18	19	70
Wave 1																				
1. Coop.	1																			
2. Resol.	**69.	1																		
3. Const.	.35**	.38**	_																	
4. Stw.	55	** 69	30 **	-																
5. Frq/Sev	- 41 <b>*</b> *	** 85		.56**	-															
6. Host.	40	** 95			.63**	-														
7. Destr.	33 **	***************************************	20 **	.26**	.15	.26**	-													
8. M. Pro	.05	11.	.10	00	01	90.–	11	-												
9. F. Pro	60.	.07	90.	.08	.01	90.	.03	.31**	_											
10. T. Pro	10	09	07	90.	.18**	60:	.03	.18**	*31.	-										
Wave 2																				
11. M Pos.	.23**	.23**	.17**	13	90	10	05	.13	.13*	00	-									
12. F Pos	11.	.12	01	.05	01	.05	80.	60.	***	.05	**69.	-								
13. Warm	.30**	.28**	.17**	18	16	*13	90	.27**	.25**	60:		**09.	-							
14. M. E. Reac	.26**	.23**	.23**	26 **	26	24 <b>**</b>	.01	.07	.00	03	60:		**61.	1						
15. F. E.Reac	.18**	.12	.07	15	18	18	05	60.	05	01	.12	.05	*41.	.28**	1					
16. M. B. Dys	.17*	*41.	.03	30	16		01	.16*	02	80.	90.–	90	.00	.30**	.30**	П				
17. F. B.Dys	.24**	.18**	.13*	15*	22	21	00.	.19**	.07	90.	.16*	.13*	.18**	*91.	.39**	.57**	-			
Wave 3																				
18. M. Pro	.05	.02	90.–	90.	90.	.00	.11	.43**	.29**	.10		**61.	.35**	05	01	*91.	**61.	_		
19. F. Pro	*31.	11.	.07	07	07	08	04	.21**	.46**	.21**	**61.	.20**	.30**	02	.10	.20**	.29**	.38**	-	
20. T. Pro	07	01	.02	.07	.12	90.	00.	.15*		.27**	07	04	80.	90.	.00	01	12	.15*	.22**	_
M	14.58	4.18	9.36	6.62	8.17	13.61	3.48	2.59	2.68	2.4	47.83	50.80	85.71	31.07	30.62	22.61	22.27	2.60	2.69	2.43
SD	2.22	10.62	3.10	2.26	2.75	4.36	7.39	.37	.33	.53	5.87	4.53	96.9	3.87	4.15	2.72	2.72	.36	.33	.45

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Variable	Z

Note: Because of missing data, ns range from 288 to 236. M = Male; F = Female; T = Teacher. Coop = Cooperation, Resol = Resolution, Stw = Stonewalling, Frq/Sev = Frequency/Severity all are subscales on the Conflict Properties Scale; Host = Hostility subscale of the O'Leary Porter Scale; Const = Overall Constructiveness, Dest = Overall Destructiveness both from observational coding; Pos = Positive Parenting subscale from the Alabama Parenting Questionnaire; Warm = Warmth subscale from the Parental Acceptance Rejection Questionnaire; Em Reac = Emotional Reactivity, B Dys = Behavior Dysregulation are both from subscales from the Security in the Marital Subsytem-Parent Report Inventory; Pro = Prosocial Subscle of the Child Behavior Scale.

p < .05.

\*\* p < .01.