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## Effects of the Inter-Parental Relationship on Adolescents' Emotional Security and Adjustment: The Important Role of Fathers

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### Abstract

We examined the mediational roles of multiple types of adolescents' emotional security in relations between multiple aspects of the inter-parental relationship and adolescents' mental health from ages 13 to 16 ( $N = 392$ ). General marital quality, non-violent parent conflict, and physical intimate partner violence independently predicted mental health. Security in the father-adolescent relationship, over and above security with the mother and security in regard to parent conflict, mediated the link from general marital quality to adolescents' mental health. With two exceptions, paths were stable for boys and girls, biological- and step-fathers, and Anglo- and Mexican-Americans. The findings reveal the need to expand the traditional foci on parent conflict and relationships with mothers to include general marital quality and relationships with fathers.

### Keywords

parent conflict; marital quality; intimate partner violence; mattering; emotional security; father-child relationships

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Much empirical and theoretical attention has been given to effects of the inter-parental relationship on children's adjustment. An early meta-analysis by Reid and Crisaflli (1990) considered two aspects of the inter-parental relationship -- marital dissatisfaction and inter-parental conflict -- and researchers since then have generally found that parent conflict is the more powerful predictor (e.g., Cummings, Davies, & Simpson, 1994; Katz & Gottman, 1993). Thus, the "first generation" of research coalesced around correlates of parent conflict, as reflected in a later meta-analysis by Buehler et al. (1997). However, the complex relationship between parent conflict and child outcomes, as revealed in modest associations and unpredictability of different types of outcomes, led to a "second generation" search for mediators and moderators. Most recently there have been calls (Davies, Harold, Goeke-Morey, & Cummings, 2002; Fincham & Grych, 2001) to combine first- and second-generation approaches by theoretically distinguishing interrelated aspects of marital functioning that are likely to be differentially related to children's adjustment and by specifying theoretically-derived mediators and moderators.

The current study responds to that call by distinguishing non-violent parent conflict from a broader assessment of the overall emotional quality of the marital relationship, and from the occurrence of physical intimate partner violence (IPV). In testing for pathways uniquely associated with each of these aspects of marital functioning, we specified a mediational role for adolescents' emotional security, and differentiated their emotional security in the face of parent conflict from their emotional security in each dyadic parent-adolescent relationship.

Our exploration of mediators of parent conflict was guided by Emotional Security Theory (EST; Cummings & Davies, 1996; 2010), which holds that parent conflict threatens children's security in the family context. Children's insecurity is expressed in dysregulated emotions (e.g., fear and anxiety), excessive regulation of exposure to parent conflict (e.g., avoidance and involvement), and threatening representations (e.g., that parents will divorce or hurt each other; Davies, Forman, Rasi, & Stevens, 2002). Based on this conceptualization of security at emotion, behavior, and representation levels, we derived indicators of these three classes of regulatory processes from pertinent items of the Children's Perception of Interparental Conflict (CPIC) scale rather than other sources of these variables (e.g., the measures used by Davies et al., 2002). This represents a modest extension of EST at the measurement level, by providing some assurance that results are not item-dependent. Previous studies have found a mediational role of emotional security between parent conflict and children's adjustment (Cummings, George, McCoy, & Davies, 2012; Harold, Shelton, Goeke-Morey, & Cummings, 2004; Schacht, Cummings & Davies, 2009).

To further clarify the distinctive role of children's emotional security about parent conflict we differentiated this type of emotional security from security in dyadic parent-child relationships. Davies et al. (2002) found that parent conflict was directly related to children's emotional insecurity about parent conflict, but was indirectly related, through parenting difficulties, to children's attachment security with both parents. For emotional security with parents, we assessed how much adolescents felt they mattered to their parents (Elliott, 2009; Marshall, 2001; Rosenberg & McCullough, 1981). The construct of mattering to parents does not include specific parental behaviors, but rather focuses on the meanings that children assign to the quantity and quality of their interactions with parents (Marshall, 2001).

Rosenberg and McCullough (1981) argued that one's perceived mattering to another involves perceptions of (a) how important I am to the other, (b) how much attention I receive from the other, and (c) how much the other is dependent on me. Marshall (2001) developed an 11-item scale, which was found to be unidimensional, and which included five importance items (e.g., "I matter to my mother."), four attention items (e.g., "My father notices when I need help."), and two dependence items (e.g., "I am needed by my mother."). In the current study, we used a 7-item scale that was developed for this project and that focuses only on the importance aspect. Velez, Braver, Cookston, Fabricius, and Parke (2015) report that a confirmatory factor analysis shows that this scale is unidimensional.

Marshall (2001) found that children's perceived mattering to parents was strongly related to parental acceptance and support. Stevenson, Fabricius, Cookston, Parke, Coltrane, Braver, and Saenz (2014), using the same scale as reported here, found that the amount of daily interactions adolescents had with the same sex parent predicted perceptions of mattering to that parent one to two years later in a cross-lagged model. If children believe they matter to the parent, this implies that they can trust that the parent will be there when needed. In turn it reflects how emotionally secure children likely feel in the relationship. In concert with emotional security theory (Cummings & Davies, 1996) and attachment theory (Bowlby, 1969), which hold that children's emotional security in the family supports their optimal adjustment, Rosenberg and McCullough (1981) found that adolescents' perceived mattering to parents was related to their mental health including depression, anxiety and delinquency even after controlling for self-esteem.

Although calls persist for more comprehensive models of the influence of fathers on child development (Parke, 2002; Phares, Fields, Kamboukos, & Lopez, 2005), we lack an understanding of adolescents' emotional security with each parent. One exception involves the influence of parent conflict on emotional security with parents. According to the father vulnerability hypothesis, father-child relationships are more impacted by parent conflict than mother-child relationships (Cummings, Merrilees, & Ward-George, 2010). Stevenson et al. (2014) found that marital problems due to the father negatively impacted how much adolescents felt they mattered to their fathers, but marital problems due to the mother did not affect the mother-adolescent relationship. In terms of mediating the relation between parent conflict and child adjustment, Sturge-Apple, Davies, and Cummings (2006) found that fathers' emotional unavailability was a more consistent mediator than mothers' emotional unavailability.

When assessing the parent-child relationship, it is especially important to include fathers. When studies are reported in the media that only include mothers, we risk giving the impression that children's relationships with fathers are less important. The extent studies of children's fundamental perception of how much they matter to their parents show that this is not the case. Using the same scale of mattering as reported here, Schenck, Braver, Wolchik, Saenz, Cookston, and Fabricius (2009) found that in step-father families, perceived mattering to mothers and to both non-residential biological fathers and residential step-fathers was concurrently related to adolescents' internalizing and externalizing problems, while Velez et al. (2015) found similar relations in intact-families. Both studies found

indications that mattering to fathers might be more strongly related to mental health than mattering to mothers.

When studying perception of mattering, it is important to focus on adolescence. This is a time period when children may be re-evaluating their perceptions of how much they matter to their parents because many parents tend to distance themselves emotionally from their offspring during adolescence in an effort to promote independence (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996; Larson & Richards, 1991). If their efforts to promote independence result in less time spent interacting with their adolescents, parents risk inadvertently giving children the message that they now matter less (Stevenson et al., 2014). Shaken confidence in how much adolescents feel they matter to their parents could help explain the substantial parental impact on adolescents' adjustment, including self-esteem, delinquent behaviors (Parker & Benson, 2005), and peer and dating relationships (Leidy, Schofield, & Parke, 2013; Linder & Collins, 2005).

Earlier work on parent conflict has largely ignored related aspects of the inter-parental relationship. One of these is general marital quality by which we mean both positive features such as feelings of closeness as well as negative features such as marital problems. Distinguishing parent conflict from general marital quality can help clarify the source of fathering vulnerability. For example, competent fathering is related to marital intimacy (Bradford & Hawkins, 2006), and the father-son relationship is related to fathers' marital satisfaction (Bernier, Jarry-Boileau, & Lacharite, 2014). Stevenson et al. (2014) found a pathway from marital problems due to mothers to increased maternal gatekeeping attitudes, which in turn negatively impacted father-adolescent interaction and adolescents' perceptions of how much they mattered to their fathers. However, marital quality indices in these studies could be confounded with other aspects of the inter-parental relationship, including parent conflict. Furthermore, it is possible that parent conflict might affect children's emotional security and adjustment primarily in the context of poor general marital quality, or it is possible that either poor marital quality or parent conflict could have negative consequences, which would necessitate reevaluation of theoretical accounts of effects assumed to be unique to parent conflict. In the current study, we used four of the five scales (i.e., marital problems, marital love and affection, marital interaction, and divorce thoughts) that were utilized by Johnson, White, Edwards, and Booth (1986) to measure general marital quality. We did not use the marital disagreement scale because it reflects parent conflict, which we wanted to differentiate from general marital quality. We also used one additional scale (i.e., overall inter-parental relationship) that was developed for this project. By differentiating general marital quality from parent conflict, we were able to examine independent and interactive effects associated with each.

Prior work often fails to distinguish between IPV and non-violent parent conflict. For example, Buehler et al. (1997) focused on parent conflict as the sole predictor of child outcomes, but their measures of parent conflict included indicators of physical IPV. Relatedly, research on IPV seldom controls for non-violent parent conflict. Recent research on a mediational role of emotional security in the impact of physical IPV on children's anxiety and depression (Bergman, Cummings, & Davies, 2014), and on children's anger reactivity to physical IPV (Manning, Davies, & Cicchetti, 2014), did not assess other aspects

of the inter-parental relationship, including non-violent parent conflict. Moreover, Jouriles, Murphy, and O'Leary (1989) found independent effects of physical IPV controlling for marital quality, but not controlling for non-violent parent conflict. In one notable exception, McNeal and Amato (1998) found that non-violent parent conflict was related to poorer relationships with fathers and low self-esteem, whereas violent conflict was related to children's lower life satisfaction, self-esteem, distress and greater violence in their own lives. It is possible that harmful effects of parent conflict in many studies could be at least partly due to the co-existence of IPV. Therefore, we distinguished physical IPV (but not sexual violence, threats, or emotional abuse) from the other aspects of the inter-parental relationship.

The consideration of contextual factors is critical to better understand the impact of the inter-parental relationship (Cummings et al., 2010). Girls have been found to be more vulnerable to parent conflict than boys in some studies (Davies & Lindsay, 2004; Shelton, Harold, Goeke-Morey, & Cummings, 2006), but others (El-Sheikh, Cummings, Kouros, Elmore-Staton, & Buckhalt, 2008) have found no differences due to child sex in the relation between the inter-parental relationship and child adjustment. Some studies have found that the same-sex parent is more influential than the opposite-sex parent (Crockenberg & Langrock, 2001; Stevenson, et al. 2014), while others have found a variety of relations between child sex and parent sex across different parenting and interaction patterns (McHale, 1995; Cowan, Cowan, & Kerig 1993). In light of these inconsistencies across prior studies, we explored the moderated role of adolescent sex but offered no specific hypotheses. We also examined ethnicity (Mexican American and European American), and family structure (intact and stepfather) as moderators of mediational pathways. Some studies have found different child attributions about fathering depending on different ethnicities and family structures (Finlay et al., 2014), and others have found unique effects of step-fathers on children's adjustment (Schenck et al., 2009; Stevenson et al., 2014) which led us to expect greater effects of negative inter-parental relationships in Mexican-American and step-father families than European-American and intact-father families.

Multi-reporter measures of children's adjustment are considered a strength, but raise the problem of how to deal with discrepant reports. Kraemer, Measelle, Ablow, Essex, Boyce, and Kupfer (2003) have developed a solution in which reporters are selected such that their perspectives are orthogonal to each other (e.g., child's own self-perspective versus adult-perspective), and the contexts in which they view the child are likewise orthogonal (e.g., home versus school). Principal Components Analysis (PCA) is then used to obtain a core measure of adjustment that is free of the error due to reporters' differences and that represents the variance that they share. In accord with this approach, we conducted one PCA on mothers', fathers', teachers', and adolescents' self-reports of internalizing, and a separate PCA on externalizing. The first components in the two multi-reporter PCAs thus represent core measures of internalizing (I) and externalizing (E) symptoms, respectively. Finally, following Boyce, Essex, Alkon, Goldsmith, Kraemer, & Kupfer (2006), we calculated an overall total symptom severity score (i.e., the average of the standardized core scores for I and E  $[(I + E)/2]$ ). It is possible to also obtain a symptom directionality score  $[(I - E)/2]$ , which indicates the relative balance of internalizing versus externalizing, but we did not

employ this for want of any theoretical expectation of differential effects, and because preliminary analyses showed no significant effects on directionality.

We used three waves of longitudinal data to establish temporal precedence among our predictors, mediators, and outcomes. The inter-parental relationship measures were from wave 1, and we combined fathers' and mothers' reports because we are not interested in an individual parent's perspective. The measures of mattering to father and mother and emotional security about parent conflict were from wave 2 (reported by adolescents), and the adolescent adjustment measures were from wave 3 (reported by father, mother, adolescent, and teachers). To control for the previous levels of mediators and outcomes with autoregressive paths, we also included the mediators and outcomes at wave 1.

## Method

### Participants

The data are from the Parents and Youth Study (PAYS), a multiwave panel study of families with a 12-year-old child, conducted in two United States metropolitan areas: Phoenix, Arizona and Riverside, California. Data from the first three waves are reported here: wave 1 when adolescents were in grade 7 (mean age 12.95 years), wave 2 in grades 8 or 9 ( $M = 14.42$ ), and wave 3 in grade 10 ( $M = 16.06$ ). There were 187 boys and 205 girls, approximately half ( $n = 199$ ) European-American and half ( $n = 193$ ) Mexican-American. All family members were the same, self-identified ethnicity. The families consisted of 217 intact families (i.e., adolescent living with both biological parents in the same household) and 175 step-father families (i.e., adolescent living more than half the time during the year of recruitment with the biological mother and a man "acting in a father role" who was not the biological father). On all measures analyzed here, questions about the child's father or the mother's partner refer to the co-resident biological father in intact families and to the co-resident step-father in step-father families.

With respect to attrition, wave 1 had 392 families that participated: 312 (80%) families entered the study married and 80 (20%) were cohabitating. Interviews were obtained from at least one family member for 367 families at wave 2 and 326 at wave 3, resulting in 6% attrition from Wave 1 to Wave 2, and 11% attrition from Wave 2 to Wave 3. Families who dropped at wave 3 had lower adjusted incomes than families who were retained ( $M = \$55,657$  vs.  $M = \$69,841$ ;  $t(389) = -2.24$ ,  $p < .01$ ). Regarding study variables, families who were lost at wave 3 had more IPV ( $M = .27$  vs.  $M = -.05$ ;  $t(390) = 3.22$ ,  $p < .01$ ), lower mattering to fathers ( $M = 30.05$  vs.  $M = 31.67$ ;  $t(390) = -2.67$ ,  $p < .01$ ), and lower emotional security about parent conflict ( $M = 12.22$  vs.  $M = 13.51$ ;  $t(387) = -3.00$ ,  $p < .01$ ) at wave 1 than retained families.

Family recruitment strategy details are given in Stevenson et al., (2014). Teachers were recruited by asking adolescents to provide the names of two teachers at wave 1 and 2, and three teachers at wave 3. A letter describing the project and a copy of the parents' written consent were mailed to teachers requesting them to complete an enclosed questionnaire about the adolescent's behavior.

## Procedures

At both wave 1 and wave 3, all three family members were interviewed in their language of preference (English or Spanish) by different interviewers in different rooms either at home (Phoenix site) or at a university lab (Riverside site). Wave 2 interviews were by phone. Across all 3 waves, measures reported here were part of a larger battery, in which interviewers presented most measures verbally. Scales targeting sensitive topics including sexual behavior, substance use, marital problems, divorce thoughts, and physical intimate partner violence (IPV) were presented in a self-administered, paper-and-pencil format during the interview to preserve confidentiality.

## Measures

**Marital problems**—Parents responded to eight of the original 13 items of the Marital Problems scale from Johnson, Edward, White, and Booth (1986) based on item content suggesting direct dyadic problems. Sample items included “Have you had problems in the past year because one or both of you got angry easily?” and “...because one or both of you was moody?” We left out five items from the original 13 items that tended to be more about an individual’s behaviors (drinking and using drugs, trouble with the law, irritating habits, not being home enough, and spending money foolishly). The response choices were 0 (*no*) and 1 (*yes*). Items were summed to form a total score of marital problems where higher scores indicated more problems. Mothers reported significantly more marital problems ( $M = 2.82$ ) than fathers ( $M = 2.49$ ;  $t(391) = -2.79$ ,  $p = .006$ ). The correlation between parents was .44,  $N = 392$ ,  $p < .001$ . The mean of the two parents’ scores formed the index of marital problems, and was used as one indicator of general marital quality.

**Overall inter-parental relationship**—Parents responded to two items created for this study to assess their overall relationship: “How well do you get along with partner?” and “What kind of relationship do you have with partner?” The response choices for the first question ranged from 0 (*extremely well*) to 4 (*not well at all*), and for the second ranged from 0 (*the worst*) to 6 (*the best*). We recoded the first question to have the same scale as the second question. Higher scores indicated a better overall relationship. Correlations for fathers and mothers were .80 and .87, respectively. Fathers reported significantly better relationships ( $M = 5.03$ ) than mothers ( $M = 4.92$ ;  $t(386) = 2.03$ ,  $p = .045$ ). The correlation between parents was .45,  $N = 387$ ,  $p < .001$ . The mean of the parents’ scores formed the index of overall inter-parental relationship, and was used as one indicator of general marital quality.

**Marital love and affection**—Parents responded to four of the original 11 items from the marital happiness subscale of Johnson et al.’s (1986) scale based on item content referencing broad feelings of love and satisfaction. Sample items included “How happy are you with the amount of love and affection you receive from your partner?” “... with your partner as someone to do things with?” “Talking all things together, how would you describe your marriage? Would you say that your marriage is...” and “Would you say that the feeling of love you have for your partner are...” We left out seven items from the original 11 items that tended to be more about satisfaction with specific situations (e.g., financial, sexual). The response choices for the first three questions ranged from 0 (*not too happy*) to 2 (*very*



*happy*), and for the last question ranged from 0 (*not strong at all*) to 3 (*extremely strong*). We recoded the first three questions to have the same scale as the last question. Higher scores indicated more marital love and affection. Reliability was good for fathers ( $\alpha = .85$ ) and mothers ( $\alpha = .86$ ). Fathers ( $M = 2.25$ ) and mothers ( $M = 2.18$ ) did not differ,  $t(391) = 1.71$ ,  $p = .087$ . The correlation between parents was  $.42$ ,  $p < .001$ . The mean of the parents' scores formed the index of marital love and affection, and was used as one indicator of general marital quality.

**Marital interaction frequency**—Parents responded to the 5-item marital interaction subscale of Johnson et al. (1986). Sample items included “In the past month, how often have you and your partner eaten your main meal together?” and “... gone shopping together?” The response choices ranged from 0 (*never*) to 3 (*almost always*). Higher scores indicated more frequent marital interactions. Reliability was good for fathers ( $\alpha = .76$ ) and for mothers ( $\alpha = .74$ ). Fathers ( $M = 1.84$ ) and mothers ( $M = 1.84$ ) did not differ,  $t(385) = .23$ ,  $p = .819$ . The correlation between parents was  $.49$ ,  $p < .001$ . The mean of the parents' scores formed the index of marital interaction frequency, and was used as one indicator of general marital quality.

**Divorce thoughts**—Parents responded to the 5-item abbreviated form of the Marital Instability Index of Booth, Johnson, and Edwards (1983). Sample items included “How often have you thought your marriage or relationship might be in trouble?” and “How often has the thought of getting a divorce or separation from your partner crossed your mind?” The response choices ranged from 0 (*never*) to 3 (*very often*). One item (“how often did you and your partner talk about consulting an attorney about getting a divorce”) was removed to increase reliability from both parents. Higher scores indicated more frequent thoughts about divorce. Reliability was good for fathers ( $\alpha = .85$ ) and mothers ( $\alpha = .89$ ). Mothers ( $M = .47$ ) reported more frequent divorce or separation thoughts than fathers ( $M = .38$ ;  $t(388) = -3.33$ ,  $p = .001$ ). The correlation between the parents was  $.44$ ,  $p < .001$ . The mean of the parents' scores formed the index of divorce thoughts, and was used as one indicator of general marital quality.

**Non-violent parent conflict**—Parents responded to five items from the intensity and frequency subscales of the Children's Perception of Interparental Conflict (CPIC) scale which did not contain physical violent behaviors (Grych, Seid, & Fincham, 1992): “Child never saw you and partner arguing or disagreeing,” “When you and partner had a disagreement, you discussed it quietly,” “When you and partner had an argument in front of child, you yelled a lot,” “Child saw that you and partner got really mad when you argued,” and “Child saw that you and partner often nagged and complained about each other around the house.” They were asked to think of the past year. The response choices were 0 (*true*), 1 (*sort of true*) and 2 (*false*). Rather than forming a scale, each item was used as an indicator of parent conflict. We reverse coded the last three items to make higher scores reflect higher levels of parent conflict. Mothers reported significantly higher levels of conflict on the first two items ( $M_s = .50$  and  $.77$ ) than fathers ( $M_s = .37$  and  $.67$ ;  $t(389) = 3.20$ ,  $p = .002$ , and  $t(389) = 2.28$ ,  $p = .023$ , respectively), but not the other three items ( $t_s < 1$ ). The correlations

between parents on each item ranged from .23 to .36,  $Ns = 390$  to  $391$ ,  $ps < .01$ . The mean of the parents' scores on each item provided five indices of non-violent parent conflict.

**Intimate partner violence**—We combined the Physical Assault Subscale items from Straus, Hamby, Boney-McCoy, and Sugarman (1996) into one question asking how many times any types of physical assault (“shoved, slapped, punched, kicked, bit, choked you, threw things at you or any similar physical act”) had been committed in the past year. Each parent was asked this question (in the self-administered format) once for mother's violence toward father and once for father's violence toward mother. Also, we combined the Injury Subscale items from Straus et al. (1996) into one question asking how many times injury (“bleeding or bruised”) had occurred from domestic physical assault in the past year. Each parent was asked this question (in the self-administered format) once about mother's injury from father and once about father's injury from mother. The response scale was 0 (*never*) 1 (*once*) 2 (*twice*) 3 (*three to five times*) 4 (*six to 10 times*) 5 (*11 to 20 times*) 6 (*more than 20 times*).

Father's physical assault on mother by fathers' reports ( $M = .16$ ) and by mothers' reports ( $M = .19$ ) did not differ  $t(390) = .92, p = .358$ , and mother's physical assault on father by fathers' reports ( $M = .23$ ) and by mothers' reports ( $M = .20$ ) did not differ,  $t(390) = .80, p = .424$ . Injury to father by fathers' reports ( $M = .03$ ) and by mothers' reports ( $M = .02$ ) did not differ  $t(390) = .73, p = .468$ , and injury to mother by fathers' reports ( $M = .03$ ) and by mothers' reports ( $M = .04$ ) did not differ,  $t(390) = .49, p = .622$ . Correlations between parents were as follows: fathers' physical assault (.29); mothers' physical assault (.36); fathers' sustaining injuries (.40); mothers' injuries (.27,  $Ns = 391$ ,  $ps < .01$ ). The mean of the parents' scores on each item (father physically assault mother, mother physically assault father, father injure mother, mother injure father) provided four indices of physical IPV.

Parents also responded (in the verbal interview format) to two items from the intensity subscale of the Children's Perception of Interparental Conflict (CPIC) scale which ask about other types of physically intimidating violent behaviors (Grych et al., 1992): “Child saw that you and partner sometimes pushed or shoved each other during arguments,” and “You and partner broke or threw things during arguments in front of the child.” They were asked to think of the past year. The response choices were 0 (*false*), 1 (*sort of true*) and 2 (*true*). Fathers ( $Ms = .09$  and  $.12$ ) and mothers' ( $Ms = .08$  and  $.10$ ) reports did not differ,  $t(390) = 48, p = .633$ , and  $t(388) = .45, p = .651$ , respectively. The correlations between parents on items were both .34 ( $Ns = 391$  and  $389$ ,  $ps < .01$ ). The mean of the parents' scores on each item provided two additional indices of IPV.

**Emotional security about parent conflict**—Adolescents responded to four items from the threat-to-self subscale and two items from the coping efficacy subscale of the Children's Perception of Interparental Conflict (CPIC) scale (Grych et al., 1992): “I got scared when my parents argued,” “When my parents argued I worried about what would happen to me,” “When my parents argued I worried that one of them would get hurt,” “When my parents argued I worried that they might get divorced,” “When my parents argued I went to my room or stayed away until it was over,” and “When my parents argued I tried to get them to stop.” We selected these items based on contents which measured the three components of

children's emotional security about parent conflict; i.e., emotional reactivity, regulation of exposure to parent affect, and internal representations of inter-parental relations (Davies et al., 2002). Items 1 and 2 measured children's *emotional reactivity*, items 3 and 4 measured internal representations of inter-parental relations, and items 5 and 6 measured *regulation of exposure to parent affect*. The response choices were 0 (*true*), 1 (*sort of true*) and 2 (*false*). Reliability was good (W1  $\alpha = .74$ ; W2  $\alpha = .72$ ). The mean of the items provided an index of adolescents' emotional security about parent conflict at waves 1 and 2.

**Mattering**—Adolescents responded to seven items adapted from Rosenberg and McCullough (1981) to assess children's perceptions of mattering to each parent. Sample items included “My (dad/mother) really cares about me,” and “I'm not that important to my (dad/mother).” (See Stevenson et al, 2014 for complete list of items). Responses ranged from 0 (*strongly agree*) to 4 (*strongly disagree*). Reliability was good for fathers (W1  $\alpha = .86$ ; W2  $\alpha = .89$ ) and mothers (W1  $\alpha = .77$ ; W2  $\alpha = .81$ ). The mean of the items for each parent provided an index of perceived mattering to each parent at waves 1 and 2.

**Internalizing**—Adolescents responded to seven items from the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978). The response choices were 0 (*no*) and 1 (*yes*). One item was removed to increase the reliability (W1  $\alpha = .65$ ; W3  $\alpha = .67$ ). Adolescents also responded to eight items of the Child Depression Inventory (CDI; Kovacs, 1992). The response choices ranged from 0 (*no experienced problems*) to 2 (*frequent experienced problems*). One item was removed to increase the reliability (W1  $\alpha = .66$ ; W3  $\alpha = .65$ ). Anxiety and depression were highly correlated ( $r = .56, N = 391, p < .01$  at wave 1;  $r = .60, N = 322, p < .01$  at wave 3). Thus, each scale was standardized and the mean of the two scales provided an index of adolescents' reports on their internalizing problems. Parents responded to 10 items from the internalizing subscale of the Behavioral Problem Index asking about adolescents' depressed and withdrawn behaviors (BPI: National Longitudinal Study of Youth, 1979). The response choices ranged from 0 (*often true*) to 2 (*never true*). Reliability was good for both fathers (W1  $\alpha = .76$ ; W3  $\alpha = .77$ ) and mothers (W1  $\alpha = .74$ ; W3  $\alpha = .79$ ). Teachers responded to 10 items from the internalizing subscale of the BPI including depressed and withdrawn behaviors, modified for teacher report. The response choices ranged from 0 (*never*) to 4 (*very often*). Reports were obtained from one to three teachers for each adolescent and means were computed across teachers' reports. The majority adolescents had two teachers both at wave 1 ( $n = 282$ ) and wave 3 ( $n = 167$ ). Reliability for adolescents with two teachers was good (W1  $\alpha = .89$ ; W3  $\alpha = .86$ ).

**Externalizing**—Adolescents responded to 12 items modified from the aggression and delinquency subscales of the Behavior Problems Index (BPI; Peterson & Zill, 1986). The response choices ranged from 0 (*not true*) to 2 (*very true*). Reliability was good (W1  $\alpha = .82$ ; W3  $\alpha = .75$ ). Parents responded to 20 items from the externalizing subscale of the BPI including aggressive and delinquent behaviors. The response choices ranged 0 (*often true*) to 2 (*never true*). Reliability was good for both fathers (W1  $\alpha = .88$ ; W3  $\alpha = .90$ ) and mothers (W1  $\alpha = .86$ ; W3  $\alpha = .90$ ). Teachers responded to 18 items from the externalizing subscale of the BPI including aggressive and delinquent behaviors, modified for teacher. The response choices ranged from 0 (*never*) to 4 (*very often*). Means were computed across

teachers' reports. Reliability for adolescents with two teachers was excellent ( $W1 \alpha = .96$ ;  $W3 \alpha = .95$ ).

## Results

To accommodate the multiple reporters of adolescent internalizing and externalizing, we followed the approaches recommended by Kraemer et al. (2003) and Boyce et al. (2006). Separate principal component analyses for internalizing and for externalizing revealed that in both cases all reporters (mother, father, child, and teachers) loaded on the first component positively and highly. The factor loadings for both internalizing (I) and externalizing (E) on the first component were above 0.50 and 0.60 respectively, and  $\alpha$  coefficients exceeded 0.50 and 0.60 respectively. Symptom severity  $[(I + E)/2]$  was computed from the internalizing and externalizing factor scores. Higher severity scores indicated higher overall severity of symptoms.

Regarding non-normality of variables, mattering to mothers and fathers were slightly above acceptable ranges of skewness ( $W1 = 2.35$  and  $1.87$ ,  $W2 = 2.40$  and  $1.73$ ) and kurtosis ( $W1 = 7.49$  and  $3.99$ ,  $W2 = 7.00$  and  $2.85$ ). Overall inter-parental relationships and divorce thoughts also were slightly above acceptable ranges of skewness ( $1.18$  and  $1.62$ ) and kurtosis ( $2.19$  and  $3.24$ ). IPV indicators showed substantial skewness (shove =  $3.84$ , throw =  $3.28$ , M assault =  $3.05$ , F assault =  $3.09$ , M hurt =  $6.58$ , F hurt =  $8.25$ ) and kurtosis (shove =  $15.28$ , throw =  $10.85$ , M assault =  $10.70$ , F assault =  $10.34$ , M hurt =  $47.84$ , F hurt =  $82.36$ ).

## Descriptive analyses

**Patterns of Intimate Partner Violence**—About one-third of our families reported that IPV occurred at least once in the past year on at least one of our measures. Averaged across mothers' and fathers' reports on the Physical Assault Subscale (Straus et al., 1996), 22% of parents reported that mothers physically assaulted fathers; and 17% reported that fathers assaulted mothers. Mothers' mean frequency of assaults of fathers ( $M = .21$ ) was marginally greater than fathers' assaults of mothers ( $M = .17$ ;  $t(391) = 1.87$ ,  $p = .062$ ). Rates of injury reports on the Injury Subscale (Straus et al., 1996) did not differ ( $M_s = .02$  and  $.03$ , respectively;  $t(391) = 1.26$ ,  $p = .206$ ).

**Mean differences for ethnicity, family type, and sex**—Because little is known about differences in family processes related to family ethnicity, family type, and child sex, we present descriptive analyses in Table 1. Multivariate analyses were conducted on inter-parental relationship variables, and  $t$ -tests were conducted on the mediators and outcome variables.

Mexican-American (MA) parents reported lower overall quality of inter-parental relationships and somewhat less love and affection, but more time spent together than EA (European-American) parents. MA parents argued more and discussed disagreements less than EA parents. MA parents were more likely to shove each other than EA parents, and MA fathers were more likely to assault mothers. MA adolescents reported they mattered less to parents, and had less emotional security about parent conflict than EA adolescents. MA and

EA adolescents did not differ in symptom severity. Parents in step-father families reported more marital problems and thoughts about divorce or separation, somewhat more time spent together, and more assaults on each other and throwing objects than parents in intact families, and step-fathers were somewhat more likely to be hurt than biological fathers. Adolescents in step families felt they mattered less to their step-fathers than those in intact families felt they mattered to their fathers. They did not differ in symptom severity. Girls reported mattering more to fathers than boys.

Table 2 shows the correlations, means, and standard deviations for all variables. Correlations among the indicators of the different aspects of the inter-parental relationship, and between the indicators and children's emotional security about parent conflict confirm the importance of controlling for other aspects of the inter-parental relationship when investigating effects of parent conflict on emotional security. General marital quality indicators were related to mattering to fathers, and some indicators of intimate partner violence were related to mattering to fathers and mothers. General marital quality indicators were more consistently related to symptom severity at wave 1 than were non-violent parent conflict and intimate partner violence, but intimate partner violence was more consistently related to symptom severity at wave 3. Emotional security about parent conflict and mattering to mothers and fathers were related to symptom severity at wave 1, but only mattering to fathers was related to symptom severity at wave 3.

### Analytical Plan

First, we ascertained the fit of our measurement model of the inter-parental relationship, which contained the three latent constructs of general marital quality, non-violent parent conflict, and intimate partner violence. Second, we tested whether mattering to father, mattering to mother, and emotional security about parent conflict mediated relations between the constructs of the inter-parental relationship, including the interaction of non-violent parent conflict and general marital quality, and adolescents' adjustment. Third, we tested the moderating roles of ethnicity, family type, and sex for significant paths.

Models were examined using structural equation modeling (SEM) in Mplus (Version 6.12; Muthén & Muthén, 2010). The measurement model was tested with Maximum Likelihood Robust (MLR) for non-normal variables. The mediational model was tested using the Unconstrained Product Indicator (UPI) with Maximum Likelihood (ML) which generates unbiased latent interaction estimates with non-normal variables (Cham, West, Ma, & Aiken, 2012). Mediation was assessed with confidence intervals estimated by bootstrapping (Mackinnon, 2008). Moderation by ethnicity, family type, and sex was tested using multiple group analyses and chi-square difference tests between nested models where paths of interest were constrained to be equal and models where paths were free to vary across groups.

### Measurement and Mediation Models

Figure 1 shows the measurement model. Indicator variables were fixed at 1 for loadings and the model fit was acceptable,  $\chi^2(99, N=392) = 294.832, p < .001, CFI = .91, RMSEA = .07, SRMR = .06$ , and all indicators highly loaded on the hypothesized latent constructs.

Figure 2 shows the mediational model. To predict changes in mediators and adjustment over time, the auto-regressive paths from mediators and adjustment at wave 1 were included. The fit was acceptable,  $\chi^2(323, N=392) = 885.038, p < .001, CFI = .88, RMSEA = .07, SRMR = .06$ . All possible paths including direct paths, mediated paths, and correlations between variables within the same wave were assessed, but we omitted non-significant paths and correlations for ease of interpretation.

More parent conflict predicted decreased emotional security about parent conflict from wave 1 to wave 2 ( $\beta = -.17, p < .05$ ). Better marital quality predicted increased mattering to fathers from wave 1 to wave 2 ( $\beta = .25, p < .01$ ). Higher perceived mattering to fathers at wave 2 predicted decreased symptom severity from wave 1 to wave 3 ( $\beta = -.19, p < .01$ ). More IPV predicted increased symptom severity from wave 1 to wave 3 ( $\beta = .22, p < .05$ ). Finally, the interaction of non-violent parent conflict and general marital quality predicted changes in symptom severity from wave 1 to wave 3 ( $\beta = -.17, p < .05$ ). Figure 3 reveals, surprisingly, that parent conflict and general marital quality had similar effects on the development of adolescents' symptomology. Either high parent conflict or low marital quality led to the same high level of symptom severity, regardless of the level of the other variable. Low levels of conflict did not protect the adolescent from the effects of poor marital quality, and high marital quality offered no protection from the effects of parent conflict. Only when both aspects of the inter-parental relationship were more positive did adolescents show decreased symptomology.

There was significant mediation by mattering to father in the relation between general marital quality and symptom severity (unstandardized  $ab = -.036, 95\% \text{ C.I. } [-.115, -.005]$ ). Only the path from general marital quality to mattering to father was moderated by family type ( $\chi^2_{\text{diff}} = 5.07, df_{\text{diff}} = 1, p = .02$ ) and adolescent sex ( $\chi^2_{\text{diff}} = 4.58, df_{\text{diff}} = 1, p = .03$ ). The path was significant for step-father families ( $\beta = .26, p < .01$ ), but not for intact families ( $\beta = .10, p = .30$ ). The path was significant for girls ( $\beta = .37, p < .001$ ), but only marginally significant for boys ( $\beta = .15, p = .08$ ).

## Discussion

This study responds to calls (Davies et al., 2002; Fincham & Grych, 2001) for the next generation of research on parent conflict to distinguish interrelated aspects of marital functioning that are likely to be differentially related to adolescents' adjustment. We examined the effects from multiple, related aspects of the inter-parental relationship to multiple types of adolescents' emotional security and mental health, in order to gain insight into additional mediational pathways beyond those typically studied stemming from parent conflict. We distinguished non-violent parent conflict from the overall emotional quality of the marital relationship, and physical intimate partner violence, and distinguished emotional security about parent conflict from security within each dyadic parent-child relationship. Current theories about how the inter-parental relationship affects children's adjustment (e.g., Cummings & Davies, 2010) assume that effects are specific to conflict, but the methodological requirement of controlling for other related aspects of the inter-parental relationship is often not met.

Our measurement model for the multiple aspects of the inter-parental relationship showed that non-violent parent conflict was substantially correlated with the overall emotional quality of the marital relationship and the presence of physical intimate partner violence (IPV) between the parents, confirming the importance of controlling for these other aspects when studying conflict. Our finding of a unique longitudinal path from earlier higher levels of conflict to later increases in adolescents' emotional insecurity about their parents' conflict is supportive of Emotional Security Theory (EST; Cummings & Davies, 2010). The absence of paths from IPV and marital quality to emotional security about conflict showed that insecurity did not stem from the often-accompanying violence or the less intense but still potentially threatening indications that their parents are not emotionally close to one another. In addition, the absence of a path from the parent conflict X marital quality interaction to emotional security about conflict showed that emotional insecurity was not more pronounced in the subset of conflicted parents with poorer quality relationships. Finally, the relation between parent conflict and adolescents' emotional security about parent conflict did not differ for boys and girls, Mexican-American and Anglo-American families, or step-father and intact families. In sum, these results confirm the generality of the effects of parent conflict by showing that increases over time in young adolescents' dysregulated emotional, cognitive, and behavioral reactions to parent conflict were not more or less likely to occur in some of these contexts than others, and confirm that these effects were uniquely tied to parent conflict behaviors and were not contaminated by overlap with several other aspects of the inter-parental relationship.

However, we did not confirm the prediction of the father vulnerability hypothesis (Cummings et al., 2010) that the effects of parent conflict should be greater on father-child relationships than on mother-child relationships. There was no path from conflict to mattering to fathers; instead, the path was from the overall emotional quality of the marital relationship to mattering to fathers. This confirms the findings of Stevenson et al. (2014), who assessed marital problems -- one of the indicators that we used of relationship quality -- but did not control for parent conflict. They also found a direct path from marital problems to mattering to father, but only when the father was primarily responsible for marital problems. This suggests a possible spillover mechanism in which marital problems due to the father compromise competent fathering, leading to decreased feelings of mattering to father. The finding by Bradford and Hawkins (2006) that positive marital quality, including emotional intimacy, commitment, and passion, predicted competent and caring fathering is consistent with such a spillover mechanism. Furthermore, we found that this path was significant in step-father but not intact families, which appears to be consistent with Stevenson et al.'s report of transactional processes in step-father families between marital problems due to the step-father and adolescents' perceptions of mattering to their step-fathers. Finally, Stevenson et al. also found an indirect longitudinal path to mattering to father, in which marital problems due primarily to the mother predicted increased mothers' gatekeeping attitudes, which led to decreased father-child interactions, which in turn led to decreased perceptions of mattering. Thus adolescents' secure sense of mattering to fathers appears to be at risk from poor quality relationships between the parents rather than from parent conflict, and the mediational pathways appear to be varied and complex, depending on whether the mother or father is the source of marital problems and whether the father is a

resident step-father. In addition, we found that poor marital quality appeared to undermine secure sense of mattering to fathers more for daughters than it did for sons, even though overall daughters reported higher levels of mattering to fathers.

The only significant mediator of the link between the marital relationship and subsequent adjustment was adolescents' perceptions of how much they mattered to their fathers. The path from perceived mattering to father to adjustment did not differ depending on whether he was the resident biological father or the resident step-father, whether the adolescent was male or female, or whether the family was Mexican-American or Anglo-American.

We considered whether the absence of an independent contribution from the mother-child relationship to the severity of mental health symptoms could be an artifact of psychometric properties of our mattering variable. Perceived mattering to both parents was negatively skewed, and the mean was higher for mothers than fathers. This raises the possibility that there might be a threshold of "good enough mattering," beyond which further increases in mattering would not translate to improved mental health. If many more mothers were above such a threshold than fathers, it would reduce the relative impact of mattering to mothers. To check this possibility, Figure 4 shows mean wave 3 symptom severity at each of several ordinal categories of mattering scores at wave 2. There is no suggestion of a threshold for the effects of mattering on symptom severity for either parent. We confirmed this by testing for quadratic relations between mattering to each parent and symptom severity in a multiple regression analysis which controlled for mattering to the other parent. Both quadratic terms for mattering to mothers and mattering to fathers were not significant,  $t(223) = .144, p = .885$ , and  $t(223) = .138, p = .891$ , respectively. Thus the effect of mattering was linear across the upper end of the mattering scale, allowing us to safely conclude, in line with our primary findings, that when taking out what is common to the impact of mattering to mothers and fathers on adolescents' mental health, there is something unique about the impact of mattering to fathers over and above the impact of mattering to mothers. This is especially remarkable because half of our sample reported about mattering to step-fathers.

The absence of an independent contribution from emotional security about parent conflict to the severity of mental health symptoms is unusual (Davies et al. 2002). However, there have been few tests of EST in adolescence, and there is evidence that earlier childhood history of insecurity in response to parent conflict uniquely predicts adolescent psychological problems over and above emotional security during adolescence (Davies, Sturge-Apple, Bascoe, & Cummings, 2014), suggesting that it might be important to control for earlier time periods than we did here.

This study revealed a direct effect on adolescent adjustment due to the interaction between parent conflict and marital relationship quality, in which both of these aspects of the inter-parental relationship had substantially similar effects on adolescent adjustment. High parent conflict at wave 1, regardless of marital relationship quality, and low marital quality at wave 1, regardless of parent conflict, both predicted similar increases in severity of symptoms at wave 3. The effect was not modified by adolescent sex, ethnicity, or family structure; thus, like some previous studies (El-Sheikh et al., 2008) but unlike others (Davies & Lindsay,



2004), we did not find that girls were more susceptible to mental health problems stemming from inter-parental relationship difficulties.

Finally, physical IPV was the strongest direct predictor of symptom severity, even though only about 30% of our families reported any instances in the past year. This path was also not moderated by adolescent sex, ethnicity, or family structure. IPV was generally mutual between mother and fathers, which is consistent with a meta-analysis (Archer, 2000) of sex differences in IPV, although we found that mothers' assaults on fathers were marginally significantly more frequent than the reverse. Archer emphasized the importance of examining different contextual factors including sample (e.g., clinical vs. community), measurement (e.g., based on acts vs. based on consequences), and culture. Based on reports from both mothers and fathers we found some cultural differences (MA parents were more likely to shove each other than EA parents; MA fathers were more likely to assault mothers than EA fathers) and family structure differences (mothers and step-fathers were more likely to assault each other and throw objects than parents in intact families; step-fathers were marginally significantly more likely to be hurt than biological fathers). Recent studies of families receiving divorce mediation (Pokman, Rossi, Holtzworth-Munroe, Applegate, Beck, & D'Onofrio, 2014; Tanha, Beck, Figueredo, & Raghavan, 2010) have also reported that physical IPV and injury were not statistically different between men and women.

These new findings have methodological and theoretical implications. They support the supposition of EST that security regarding parent conflict and security in parent-child relationships are distinct (Davies et al., 2002), by showing that each is longitudinally related to a different aspect of family functioning. They reveal the independent contribution of the emotional quality of the inter-parental relationship, which should focus theoretical attention on mediational pathways in addition to those associated with parent conflict for understanding the effects of parents' relationships on adolescents' adjustment. Finally, previous studies of multiple, emotional-security mediating pathways neglected to distinguish between mother-child and father-child attachment security (Davies et al., 2002), and the current findings show that this is a consequential oversight because it is the father-child relationship that accounts for changes in the severity of mental health symptoms from ages 13 to 16. This calls for the development of theory to explain why the father-adolescent relationship should be more impactful. One possibility is that there might be a normative belief that mattering to mothers is unconditional, and mattering to fathers is more conditional. If adolescents subscribed to such a norm, then it might be easier for them to make external attributions for perceptions of mattering less to mother ("My mother does not care about me because she is not a good mother,") but internal attributions for mattering less to fathers ("My father does not care about me because I am not a good child.")

These findings also have implications for prevention-intervention science as well. Exclusive focus on parent conflict in intervention programs is likely to divert attention from other harmful processes. Parents are advised to minimize or contain conflict, and many parents stay in loveless relationships in which they do manage overt conflict, but our findings warn that this by itself might not protect young adolescents because they appear as likely to be harmed, in various ways, by the poor emotional quality of their parents' relationships. Likewise, few parenting interventions include fathers (Cowan, Cowan, Pruett, Pruett, &

Wong, 2009), but our findings reveal that relationships with fathers might be the more potent point of intervention during early adolescence.

The current study had several methodological strengths. By using the PCA approach (Kraemer et al., 2003), we could obtain full advantage of all of our reporters on both internalizing and externalizing symptoms. The longitudinal design including autoregressive and cross-lagged paths allowed us to test the direction of the significant mediational paths while controlling for previous time points. Finally, using different combinations of reporters at each wave helped to reduce shared method (reporter) variance.

In terms of limitations, emotional security and attachment were measured in ways that differ from past work on these constructs, which might help account for the absence of independent contributions of parent conflict to mattering to fathers, and emotional security about parent conflict to the severity of mental health symptoms (Cummings et al., 2010; Davies et al. 2002). Our measurement of IPV only included physical violence between parents. Inclusion of other types of violence including sexual violence, threats, and emotional abuse would provide better understanding of the impact of IPV. Finally, our study did not test mechanisms of the mediational paths from the emotional quality of the marital relationship, to children's mattering to father, and to adjustment. Candidate mechanisms that should be explored in future research include mothers' gatekeeping behaviors (Stevenson et al., 2014), parents' emotional security in their relationship (Davies, Sturge-Apple, Woitach, & Cummings, 2009), parenting behaviors (Cummings & Davies, 2010), adolescents' self-esteem (Elliott, 2009) and reciprocal child- and parent-effects (Stevenson et al., 2014). An additional mechanism might involve children's awareness of the emotional quality of their parents' relationships. It is not unreasonable that young adolescents would monitor not only overt conflict between their parents but also more subtle indications of lack of affection and closeness, and that both would be sources of emotional insecurity and adjustment difficulties.

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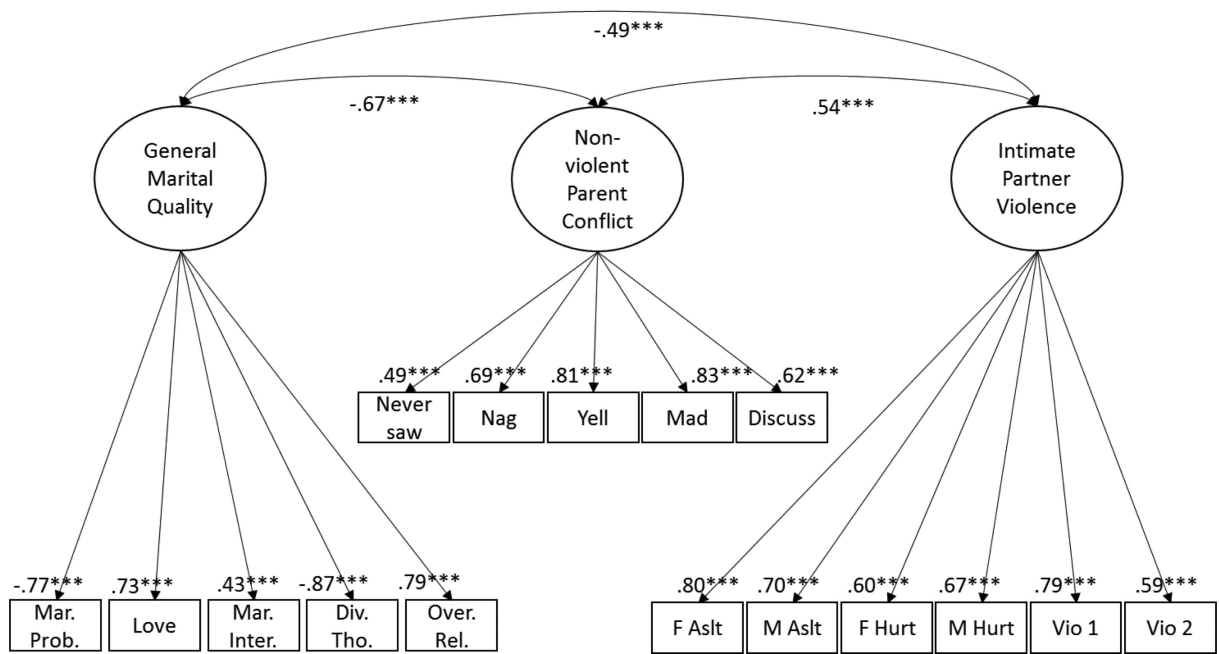
## References

- Archer J. Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin*. 2000; 126(5):651–680. [PubMed: 10989615]
- Bergman KN, Cummings EM, Davies PT. Interparental aggression and adolescent adjustment: The role of emotional insecurity and adrenocortical activity. *Journal of Family Violence*. 2014; 29(7): 763–771. [PubMed: 25360061]
- Bernier A, Jarry-Boileau V, Lacharité C. Marital satisfaction and quality of father–child interactions: The moderating role of child gender. *The Journal of Genetic Psychology*. 2014; 175(2):105–117. [PubMed: 24796158]
- Booth A, Johnson D, Edwards JN. Measuring marital instability. *Journal of Marriage and the Family*. 1983; 45:387–394.
- Bowlby, J. *Attachment*. Penguin Books; London: 1969.

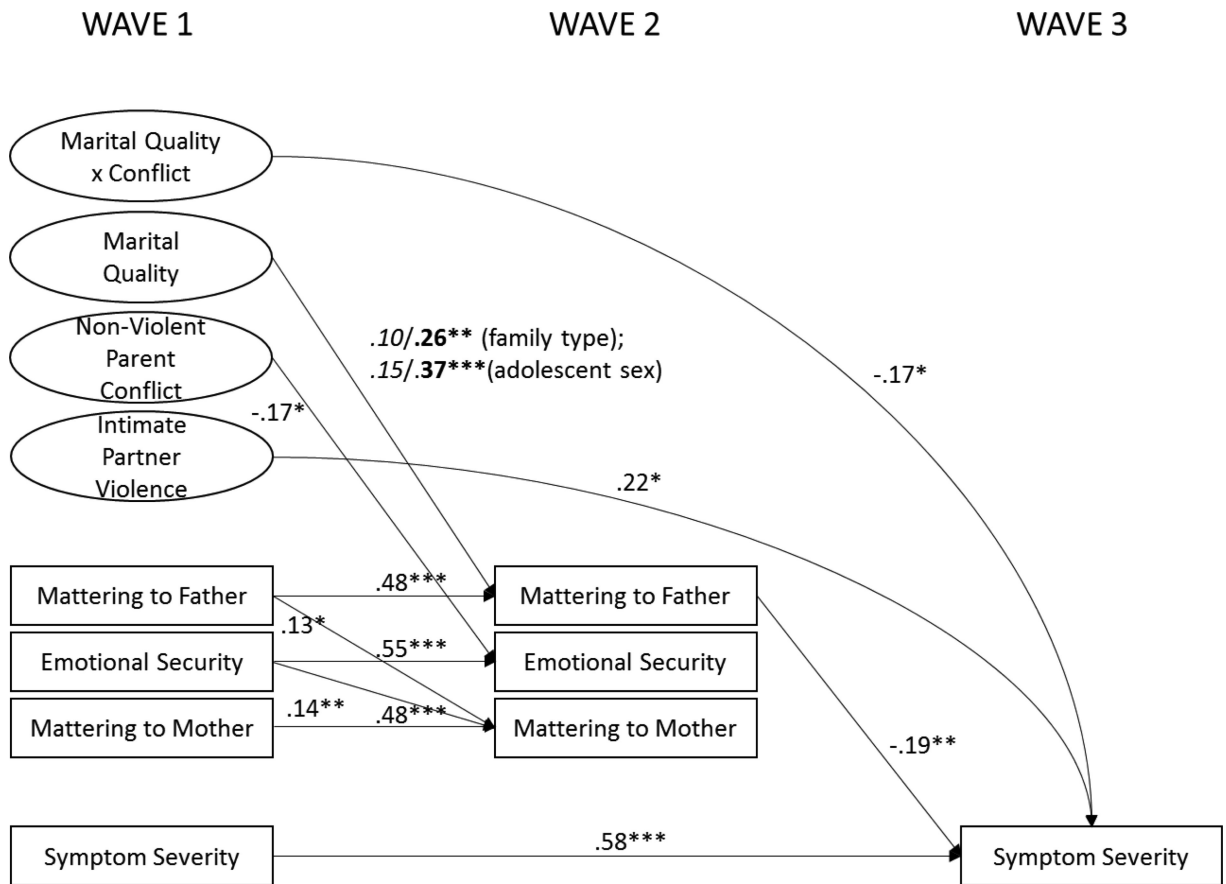
- Boyce WT, Essex MJ, Alkon A, Goldsmith HH, Kraemer HC, Kupfer DJ. Early father involvement moderates biobehavioral susceptibility to mental health problems in middle childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2006; 45(12):1510–1520. [PubMed: 17135997]
- Bradford K, Hawkins AJ. Learning competent fathering: A longitudinal analysis of marital intimacy and fathering. *Fathering*. 2006; 4(3):215–234.
- Buehler C, Anthony C, Krishnakumar A, Stone G, Gerard J, Pemberton S. Interparental conflict and youth problem behaviors: A meta-analysis. *Journal of Child and Family Studies*. 1997; 6(2):233–247.
- Cham H, West SG, Ma Y, Aiken LS. Estimating latent variable interactions with nonnormal observed data: A comparison of four approaches. *Multivariate Behavioral Research*. 2012; 47(6):840–876. [PubMed: 23457417]
- Cowan, PA.; Cowan, CP.; Kerig, PK. Mothers, fathers, sons, and daughters: Gender differences in family formation and parenting style.. In: Cowan, PA.; Field, D.; Hansen, D.; Skolnick, A.; Swanson, G., editors. *Family, self, and society: Toward a new agenda for family research*. Erlbaum; Hillsdale, NJ: 1993. p. 165-195.
- Cowan PA, Cowan CP, Pruett MK, Pruett K, Wong JJ. Promoting fathers' engagement with children: Preventive interventions for low-income families. *Journal of Marriage and Family*. 2009; 71(3): 663–679.
- Crockenberg S, Langrock A. The role of specific emotions in children's responses to interparental conflict: A test of the model. *Journal of Family Psychology*. 2001; 15(2):163–182. [PubMed: 11458627]
- 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. *Marital conflict and children: An emotional security perspective*. Guilford Press; New York: 2010.
- Cummings EM, Davies PT, Simpson KS. Marital conflict, gender, and children's appraisals and coping efficacy as mediators of child adjustment. *Journal of Family Psychology*. 1994; 8(2):141–149.
- Cummings EM, George MRW, McCoy KP, Davies PT. Interparental conflict in kindergarten and adolescent adjustment: Prospective investigation of emotional security as an explanatory mechanism. *Child Development*. 2012; 83:1703–1715. [PubMed: 22694264]
- Cummings, EM.; Merrilees, CE.; Ward-George, M. Fathers, marriages and families. Revisiting and updating the framework for fathering in family context.. In: Lamb, ME., editor. *The role of the father in child development*. Wiley; Hoboken, NJ: 2010. p. 154-176.
- Davies PT, Forman EM, Rasi JA, Stevens KI. Assessing children's emotional security in the interparental subsystem: The Security in the Interparental Subsystem (SIS) scales. *Child Development*. 2002; 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*. 2002; 67 (3, Serial No. 270).
- Davies PT, Lindsay LL. Interparental conflict and adolescent adjustment: Why does gender moderate early adolescent vulnerability? *Journal of Family Psychology*. 2004; 18:160–170. [PubMed: 14992618]
- Davies PT, Sturge-Apple M, Weitach MJ, Cummings EM. A process analysis of the transmission of distress from interparental conflict to parenting: Adult relationship security as an explanatory mechanism. *Developmental Psychology*. 2009; 45:1761–1773. [PubMed: 19899930]
- Davies PT, Sturge-Apple M, Bascoe SM, Cummings EM. The legacy of early insecurity histories in shaping adolescent adaptation to interparental conflict. *Child Development*. 2014; 85:338–354. [PubMed: 23647368]
- El-Sheikh M, Cummings EM, Kouros CD, Elmore-Staton L, Buckhalt J. Marital psychological and physical aggression and children's mental and physical health: Direct, mediated, and moderated effects. *Journal of Consulting and Clinical Psychology*. 2008; 76(1):138–148. [PubMed: 18229991]

- Elliott, G. *Family matters: The importance of mattering to family in adolescence*. Wiley-Blackwell; Chichester, U.K.; Malden, MA: 2009.
- Fincham, FD.; Grych, JH. Advancing understanding of the association between interparental conflict and child development.. In: Grych, J.; Fincham, F., editors. *Interparental conflict and child development: Theory, research, and applications*. Cambridge University Press; New York: 2001. p. 443-452.
- Finlay AK, Cookston JT, Saenz DS, Baham ME, Parke RD, Fabricius WV, Braver SL. Attributions of fathering behaviors among adolescents: The role of gender, ethnicity, family structure, and depressive symptoms. *Journal of Family Issues*. 2014; 35(4):501–525. [PubMed: 24855327]
- Grych JH, Seid M, Fincham FD. Assessing marital conflict from the child's perspective: The children's perception of interparental conflict scale. *Child Development*. 1992; 63:558–572. [PubMed: 1600822]
- Harold GT, Shelton KH, Goeke-Morey MC, Cummings EM. Marital conflict, child emotional security about family relationships and child adjustment. *Social Development*. 2004; 13(3):350–376.
- Johnson DR, White LK, Edwards JN, Booth A. Dimensions of marital quality: Toward methodological and conceptual refinement. *Journal of Family Issues*. 1986; 7:31–49.
- Jouriles EN, Murphy CM, O'Leary KD. Interspousal aggression, marital discord, and child problems. *Journal of Consulting and Clinical Psychology*. 1989; 57:453. [PubMed: 2738217]
- Katz LF, Gottman JM. Patterns of marital conflict predict children's internalizing and externalizing behaviors. *Developmental Psychology*. 1993; 29(6):940–950.
- Kovacs, M. *Children's Depression Inventory*. Multi-Health Systems, Inc.; New York: 1992.
- Kraemer H,C, Measelle J,R, Ablow J,C, Essex M,J, Boyce W,T, Kupfer D,J. A new approach to multiple informants: mixing and matching context and perspective. *The American Journal of Psychiatry*. 2003; 160(9):1566–1577. [PubMed: 12944328]
- Larson RW, Richards MH. Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development*. 1991; 62:284–300. [PubMed: 2055123]
- Larson RW, Richards MH, Moneta G, Holmbeck G, Duckett E. Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*. 1996; 32:744–754.
- Leidy, MS.; Schofield, TJ.; Parke, RD. Fathers' contribution to children's social development.. In: Canbrera, NJ.; Tamis-LeMonda, CS., editors. *Handbook of father involvement: Multidisciplinary perspectives*. Routledge; New York, NY: 2013. p. 151-167.
- Linder JR, Collins WA. Parent and peer predictors of physical aggression and conflict management in romantic relationships in early adulthood. *Journal of Family Psychology*. 2005; 19:252–262. [PubMed: 15982103]
- MacKinnon, DP. *Introduction to statistical mediation analysis*. Erlbaum; Mahwah, NJ: 2008.
- McNeal C, Amato PR. Parents' marital violence: Long-term consequences for children. *Journal of Family Issues*. 1998; 19:123–139.
- Manning LG, Davies PT, Cicchetti D. Interparental violence and childhood adjustment: How and why maternal sensitivity is a protective factor. *Child Development*. 2014; 85:2263–2278. [PubMed: 25132541]
- Marshall SK. Do I matter? Construct validation of adolescents' perceived mattering to parents and friends. *Journal of Adolescence*. 2001; 24:473–490. [PubMed: 11549327]
- McHale JP. Coparenting and triadic interactions during infancy: The roles of marital distress and child gender. *Developmental Psychology*. 1995; 31:985–996.
- Muthén, LK.; Muthén, BO. *Mplus user's guide*. 6th ed.. Muthén & Muthén; Los Angeles, CA: 2010.
- National Longitudinal Study of Youth Website. <http://www.bls.gov/nls/y79cyaguide/nlsy79cug.Htm>
- Parke, RD. Fathers and families.. In: Bornstein, M., editor. *Handbook of parenting: Vol.3. Being and becoming a parent*. 2nd ed.. Erlbaum; Mahwah, NJ: 2002. p. 27-74.
- Parker JS, Benson MJ. Parent-adolescent relations and adolescent functioning: Self-esteem, substance abuse, and delinquency. *Family Therapy*. 2005; 32:131–142.
- Phares V, Fields S, Kamboukos D, Lopez E. Commentary: Still looking for poppa. *American Psychologist*. 2005; 60:735–746. [PubMed: 16221013]

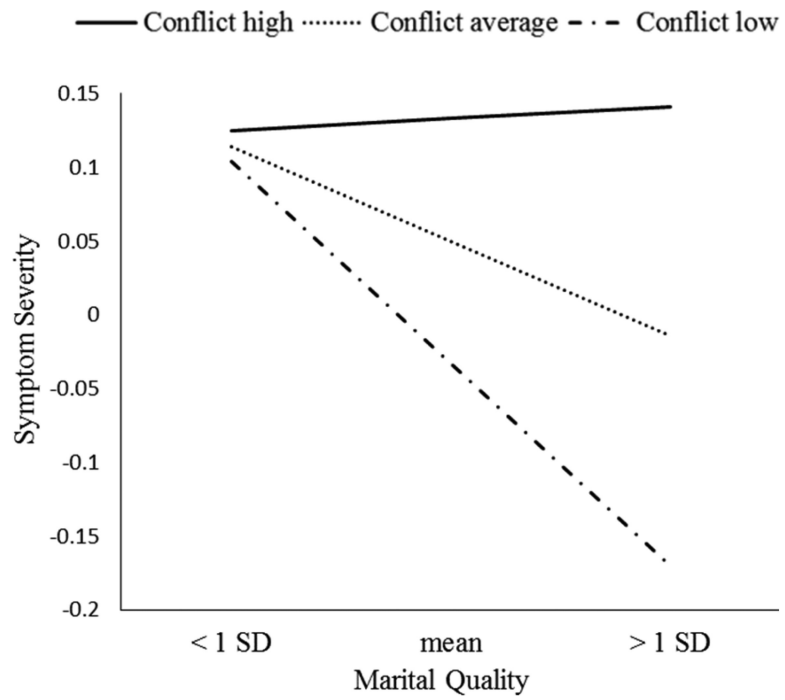
- Peterson JL, Zill N. Marital disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and the Family*. 1986; 48:295–307.
- Reid WJ, Crisafulli A. Marital discord and child behavior problems: A meta-analysis. *Journal of Abnormal Child Psychology*. 1990; 18(1):105–117. [PubMed: 2139068]
- Reynolds CR, Richmond B. What I think and feel: A revised measure of children's manifest anxiety. *Journal of Consulting and Clinical Psychology*. 1978; 6:271–280.
- Pokman V, Rossi FS, Holtzworth-Munroe A, Applegate AG, Beck CJA, D'Onofrio BM. Mediator's assessment of safety issues and concerns (MASIC): Reliability and validity of a new intimate partner violence screen. *Assessment*. 2014; 21(5):529–42. [PubMed: 24671737]
- Rosenberg M, McCullough C. Mattering: Inferred significance and mental health among adolescents. *Research in Community and Mental Health*. 1981; 2:163–182.
- Shelton KH, Harold GT, Goeke-Morey MC, Cummings EM. Children's coping with marital conflict: The role of conflict expression and gender. *Social Development*. 2006; 15:232–247.
- Schenck CE, Braver SL, Wolchik SA, Saenz D, Cookston JT, Fabricius WV. Relations between mattering to step- and non-residential fathers and adolescent mental health. *Fathering*. 2009; 7:70–90. doi:10.3149/fth.0701.70. [PubMed: 20019889]
- Stevenson MM, Fabricius WV, Cookston JT, Parke RD, Coltrane S, Braver SL, Saenz DS. Marital problems, maternal gatekeeping attitudes, and father-child relationships in adolescence. *Developmental Psychology*. 2014; 50(4):1208–1218. [PubMed: 24364832]
- Schacht PM, Cummings EM, Davies PT. Fathering in family context and child adjustment: A longitudinal analysis. *Journal of Family Psychology*. 2009; 23:790–807. [PubMed: 20001137]
- Straus MA, Hamby SL, Boney-McCoy SB, Sugarman DB. The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*. 1996; 17(3):283–316.
- Sturge-Apple M, Davies PT, Cummings EM. Impact of hostility and withdrawal in interparental conflict on parental emotional unavailability and children's adjustment difficulties. *Child Development*. 2006; 77(6):1623–1641. [PubMed: 17107450]
- Tanha M, Beck CJA, Figueredo AJ, Raghavan C. Sex differences in intimate partner violence and the use of coercive control as a motivational factor for intimate partner violence. *Journal of Interpersonal Violence*. 2010; 20(10):1–19.
- Velez, CS.; Braver, SL.; Cookston, JT.; Fabricius, WV.; Parke, RD. Does mattering to parents “matter” to adolescent mental health?. 2015. Manuscript submitted for publication



**Figure 1.** Measurement model for marital relationships.  $\chi^2(99, N = 392) = 294.832, p < .001$ , CFI: 0.91, RMSEA=0.07, SRMR=0.06. Mar. Prob = marital problems; Love = love and affection; Mar. Inter = marital interaction; Div. Tho = divorce thoughts; Over. Rel. = overall inter-parental relationship; Con 1-5 = conflict item1-item5 from CPIC; F Aslt = fathers' assault; M Aslt = mothers' assault; F Hurt = father was hurt; M Hurt = mother was hurt; Vio 1-2 = domestic violence item 1-2 from CPIC. All paths are reported in standardized path coefficients. \*\*\*p < .001.

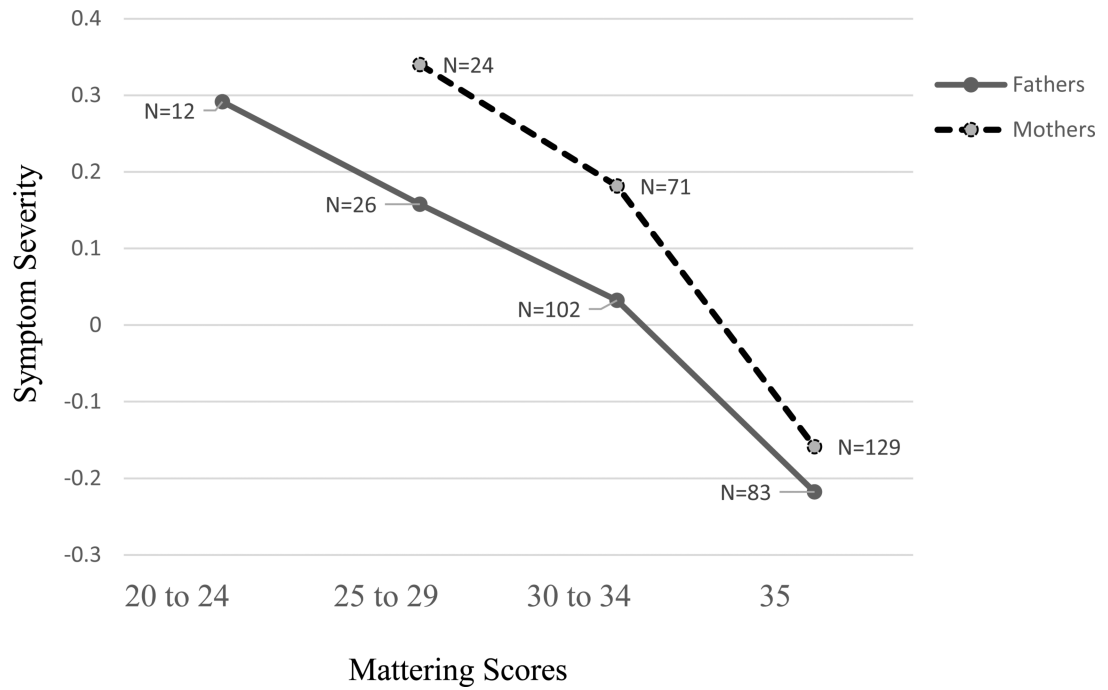


**Figure 2.** Mediation model testing mattering to a parent and emotional security as mechanisms in relations between marital relationships and adolescents' outcomes. All paths are reported in standardized path coefficients. The moderations of family structure and adolescent sex for the path from general marital quality to mattering to father were significant (*Italic* = intact families & boys. **Bold** = step families & girls). Non-significant paths and correlations between variables within the same wave are omitted for ease of interpretation; \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



**Figure 3.** Interaction between general marital quality and non-violent parent conflict at wave 1 on symptom severity at wave 3.





**Figure 4.**

Mean wave 3 symptom severity scores and ns at different levels of mattering to fathers and mothers at wave 2. (Omitted are five cases which showed lower scores than 20 for mattering to father, and 4 cases which showed lower scores than 25 for mattering to mother.)

**Table 1**

Results of Multivariate Analyses and t-tests for Family Ethnicity, Family Type, and Child Sex

	Ethnicity			Family type			Sex		
	MA	EA	<i>p</i>	Intact	Step	<i>p</i>	Boy	Girl	<i>p</i>
General marital quality	--	--	.000	--	--	.000	--	--	--
Mar. Prob.	2.74	2.58	.401	2.41	2.96	.003	--	--	--
Over. Rel.	4.86	5.10	.004	4.99	4.97	.803	--	--	--
Love	2.16	2.27	.079	2.21	2.22	.857	--	--	--
Mar Inter	2.02	1.67	.000	1.80	1.89	.088	--	--	--
Div. Tho.	0.41	0.43	.581	0.37	0.49	.010	--	--	--
Non-violent parent conflict	--	--	.000	--	--	.502	--	--	--
Never saw	1.27	1.64	.000	1.48	1.42	.336	--	--	--
Nag	0.44	0.43	.746	0.43	1.44	.796	--	--	--
Yell	0.67	0.77	.140	0.69	0.75	.333	--	--	--
Mad	0.67	0.69	.754	0.65	0.72	.244	--	--	--
Discuss	0.82	0.97	.012	0.89	0.90	.859	--	--	--
Intimate partner violence	--	--	.008	--	--	.044	--	--	--
Shove	0.13	0.04	.003	0.07	0.11	.198	--	--	--
Throw	0.12	0.10	.674	0.07	0.15	.013	--	--	--
M Assault	0.25	0.18	.139	0.15	0.29	.006	--	--	--
F Assault	0.24	0.11	.004	0.13	0.22	.037	--	--	--
M Hurt	0.05	0.03	.349	0.04	0.04	.790	--	--	--
F Hurt	0.04	0.02	.141	0.01	0.04	.073	--	--	--
Emotional security W2	1.31	1.55	.000	1.46	1.40	.271	1.45	1.42	.564
Mattering to father W2	3.31	3.55	.002	3.68	3.12	.000	3.31	3.54	.003
Mattering to mother W2	3.66	3.76	.043	3.72	3.70	.741	3.67	3.75	.097
Symptom severity W3	.08	-.06	.253	-.06	.11	.218	.00	.00	.955

*Note.* Mar. Pro. = Marital problems; Over. Rel. = overall inter-parental relationship; Love = Love and affection; Mar. Inter. = Marital interaction; Div. Tho. = Divorce thoughts; Never saw, Nag, Yell, Mad, Discuss = Conflict item1 – item5; Shove, Throw = Violence item 1-item2; M Assault = Mothers' assault; F Assault = Fathers' assault; M hurt = Mother was hurt; F hurt = Father was hurt; W2 (W3) = wave 2(wave 3).

Table 2

Correlations, Means, and Standard Deviations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
<u>Predictors</u>																	
1. Mar. Prob.	--																
2. Over. Rel.	-.60	--															
3. Love	-.54	.81	--														
4. Mar Inter	-.28	.37	.45	--													
5. Div. Tho.	.66	-.69	-.64	-.36	--												
6. Never saw	.28	-.16	-.16	-.23	.27	--											
7. Nag	.49	-.45	-.42	-.24	.52	.27	--										
8. Yell	.45	-.32	-.28	-.19	.37	.44	.52	--									
9. Mad	.50	-.43	-.34	-.17	.47	.38	.57	.70	--								
10. Discuss	.34	-.34	-.33	-.25	.36	.46	.41	.54	.44	--							
11. Shove	.25	-.30	-.27	-.05	.29	.07	.32	.31	.36	.24	--						
12. Throw	.32	-.26	-.22	-.11	.34	.11	.40	.31	.31	.26	.51	--					
13. M assault	.34	-.29	-.21	.01	.40	.14	.40	.36	.38	.26	.53	.46	--				
14. F assault	.33	-.32	-.25	-.08	.38	.10	.36	.32	.36	.29	.62	.43	.57	--			
15. M hurt	.16	-.11	-.13	-.07	.26	.08	.20	.20	.24	.18	.59	.28	.39	.61	--		
16. F hurt	.19	-.10	-.11	-.05	.27	.10	.21	.21	.21	.15	.46	.38	.47	.48	.63		
<u>Mediators</u>																	
17. ES W1	-.20	.18	.12	-.08	-.16	.01	-.16	-.19	-.28	-.11	-.19	-.16	-.22	-.18	-.13	-.08	
18. MF W1	-.17	.24	.16	.03	-.16	.05	.00	-.01	-.01	-.06	-.14	-.10	-.09	-.14	-.02	-.07	
19. MM W1	-.07	.11	.07	-.04	-.09	.08	-.03	.00	-.01	-.08	-.08	-.09	-.13	-.16	-.10	-.10	
20. ES W2	-.23	.26	.19	-.06	-.20	-.04	-.26	-.28	-.29	-.14	-.22	-.17	-.20	-.15	-.08	-.08	
																.60	
																	.11
																	.15
																	--

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
21. MF W2	-.17**	.23**	.22**	.07**	-.18**	.13*	-.04	-.03	-.03	-.01	-.06	.04	-.12*	-.11*
22. MM W2	-.06	.11*	.06	.02	-.03	.06	.00	.03	.07	-.02	-.04	-.01	-.05	-.06
<b>Outcomes</b>														
23. SSW1	.21**	-.14**	-.16**	-.14**	.22**	.01	.10	.15**	.16**	.13*	.05	.07	.16**	.12*
24. SSW3	.15*	-.06	-.12	-.04	.03	.01	.03	.10	.10	.12	.17**	.07	.10	.18**
<i>M</i>	2.66	4.98	2.22	1.84	0.42	1.45	0.43	0.72	0.68	0.89	0.09	0.11	0.21	0.17
<i>Range</i>	0-8	0-6	0-3	0-3	0-3	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-6	0-6
<i>SD</i>	1.86	0.81	0.63	0.55	0.45	0.58	0.52	0.64	0.63	0.59	0.30	0.32	0.50	0.44

Note. Mar. Pro. = Marital problems; Over. Rel. = overall inter-parental relationship; Love = Love and affection; Mar. Inter. = Marital interaction; Div. Tho. = Divorce thoughts; Never saw, Nag, Yell, Mad, Discuss = Conflict item1 – item5; Shove, Throw = Violence item 1-item2; M Assault = Mothers' assault; F Assault = Fathers' assault; M hurt = Mother was hurt; F hurt = Father was hurt; ES W1(W2)= Children's emotional security about parent conflict at wave 1(wave2); MF = Mattering to father; MM = Mattering to mother; SS = Symptom severity.

\*  $p < .05$ .

\*\*  $p < .01$ .