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Interparental conflict and emotional insecurity: coparenting and parent-child relationships as mediating family processes

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**Interparental Conflict and Emotional Insecurity:
Coparenting and Parent-Child Relationships
As Mediating Family Processes**

By

Kelly A. Fitzgerald

Accepted in Partial Completion
Of the Requirements for the Degree
Master of Science

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MASTER'S THESIS

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Kelly A. Fitzgerald
November 3rd, 2010

**Interparental Conflict and Emotional Insecurity:
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A Thesis Presented to
The Faculty of
Western Washington University

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Of the Requirements for the Degree
Master of Science

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Kelly A. Fitzgerald
November, 2010

Abstract

The relationship between exposure to destructive styles of interparental conflict and child maladjustment and psychological problems has long been documented. Marital conflict is thought to affect children by two pathways: directly, by threatening or enhancing their emotional security, or indirectly, by spilling over into coparenting and parenting practices. The present study examined both of these pathways. Participants were 74 nuclear families with infants aged 6 to 14 months. Participants engaged in two interactions: a marital discussion with their infant present and a play interaction. Results indicated a significant link between conflict expressions and emotional insecurity. Furthermore, conflict expressions were also significantly related to coparenting and parenting behaviors. While parent-child processes were linked with emotional insecurity, coparenting behaviors were not. While no mediation was observed for parenting behaviors in the relationship between conflict expression and emotional insecurity, there were trends in the anticipated directions. Results of this study highlight the importance of disseminating to clinicians and the community the significance of managing interparental conflict in appropriate, well-modulated ways. Moreover, emphasis should be placed upon the use of effective coparenting and parenting strategies, especially when destructive marital conflict exists in the home.

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Interparental Conflict and Emotional Insecurity:

Coparenting and Parent-Child Relationships as Mediating Family Processes

Exposure to conflict between parents is a typical experience for children, particularly when conflict is defined as any disagreement or difference of opinion (Cummings & Davies, 2002). The relationship between exposure to destructive styles of interparental conflict and child maladjustment and psychological problems has long been documented (Cummings & Davies, 2010). Children who repeatedly witness marital conflict often exhibit externalizing difficulties, such as heightened aggression and noncompliance (Holden & Ritchie, 1991; Jenkins & Smith, 1991). Moreover, children who are frequently exposed to marital conflict are more likely to also experience internalizing disorders, such as depression and somatic complaints (Holden & Ritchie, 1991; Johnston, Gonzalez & Campbell, 1987) and experience peer difficulties (Du Rocher Schudlich, Shamir, & Cummings, 2004). Less is known, however, about the impact marital conflict has on other family processes, such as parenting practices and the couple's ability to effectively parent as a unit.

Impact of Marital Conflict

Researchers have shown that children are responsive to the behavioral, emotional, and content mechanisms of marital discussions (see Cummings and Davies, 2002, for a review). The level of distress caused by these interactions depends on several factors including the degree to which the conflict is managed in appropriate, well-modulated ways (Cox & Brooks-Gunn, 1999), children's history of repeated exposure to destructive conflict (Davies & Cummings, 1994; Davies, Sturge-Apple, Winter, Cummings, & Farrell, 2006; Grych & Fincham, 1990), and the degree of resolution achieved following the marital

discussion (Cummings, Ballard, El-Sheik, & Lake, 1991). The importance of differentiating between destructive versus constructive conflict styles has been indicated for older children (Du Rocher Schudlich & Cummings, 2003; Du Rocher Schudlich & Cummings, 2007).

Destructive style conflict consists of verbal and non-verbal hostility, avoidance, withdrawal from conflict and/or affective distress that are perceived as hurtful or distressing by children (Du Rocher Schudlich & Cummings, 2003). Destructive marital conflict which threatens a child's need for emotional security has more negative effects on children's overall well-being than conflict which does not threaten security. On the other hand, conflict can have a positive impact on children if parents can employ effective conflict strategies, such as maintaining positive affect and utilizing problem solving (Easterbrooks, Cummings, & Emde, 1994).

Furthermore, constructive conflict strategies have been associated with more positive and less negative responses by children (Davies, Myers, & Cummings, 1996), increased positive emotionality (Cummings, Goeke-Morey, & Papp, 2002), increased prosocial behavior (McCoy, Cummings, & Davies, 2009), and increased emotional security (Goeke-Morey, Cummings, Harold, & Shelton, 2003; McCoy, Cummings, & Davies, 2009; Du Rocher Schudlich, White, Fleischhauer, & Fitzgerald, in press). However, little is known regarding whether or not infants respond differentially to destructive versus constructive styles of marital conflict.

Researchers support the notion that children as young as six months old are effectively able to distinguish between positive and angry interactions (Du Rocher Schudlich, White, Fleischhauer, Fitzgerald, in press). Infants as young as three months can distinguish between happiness, anger, fear, surprise, and disgust (Kahana-Kalman & Walker-Andrews,

2001). Given the ability to differentiate between positive and negative emotions at such a young age, it is likely that infants are also able to differentiate between destructive and constructive marital conflict because they are sensitive to the affective and behavior components of the interaction.

Emotional Security Theory

Emotional Security Theory (EST; Davies & Cummings, 1994) highlights the importance of child perceptions of safety and security within the family, especially during times of interparental conflict. Emotional security is thought to serve as a mediator between exposure to conflict and children's long-term outcomes. According to EST, marital conflict affects children through two pathways: directly, by threatening a child's sense of emotional security, and indirectly, by affecting parenting behaviors (i.e. spillover hypothesis). EST posits that there are three main components of emotional insecurity in children: increased levels of emotional reactivity (e.g. fear, sadness, anger, dysregulation), attempts at regulating exposure to parental affect (e.g. interfering in or avoiding interparental conflict), and negative internal representations of relations within the family (e.g. negative expectancies of the outcome of interparental conflict; Davies, Harold, Goeke-Morey, & Cummings, 2002). EST draws strongly upon developmental theory and attachment theory in that children's emotional security can be enhanced or impaired by the quality of the marital relationship. However, EST differs from attachment theory in that it supports the notion that maintaining this higher-order need for security extends to other family relationships as well (Cummings & Davies, 2010). If children's confidence in their parents' ability to serve as protectors and security figures is undermined as a result of destructive marital conflict, this is thought to

account for the negative effects of subsequent parenting difficulties (e.g. unresponsiveness, intrusiveness, low warmth) on children's long-term maladjustment. (Cummings & Davies, 2010).

Several studies have empirically supported EST. A longitudinal study demonstrated that emotional security served as a mediator between interparental conflict and child adjustment (both internalizing and externalizing behaviors) for children ages 5 to 7 and 9 to 18, respectively (Cummings, Schermerhorn, Davies, Goeke-Morey, & Cummings, 2006). Another study indicated that child emotional insecurity mediated the relationship between marital conflict and child adjustment after controlling for the effects of other family processes, such as parenting, for sixth to eighth graders (Davies, Harold, Goeke-Morey, & Cummings, 2002).

Coparenting Behaviors

Marital conflict affects several family processes, not just long-term child adjustment and psychological health. Conflict is thought to “spillover” from the marital dyad into other areas of family functioning (Engfer, 1988). A component of family functioning that may be affected by marital conflict is the coparenting relationship, a concept central to Minuchin's (1974) theory of family structure. In comparison to individual parenting behaviors, coparenting refers to the extent to which partners share leadership, commitment to the child, and support for one another in their roles as parents (McHale, 1995). Coparenting is an important part of children's perception of emotional security within the family in that it can expose children to patterns such as interparental turn taking, cooperation, and disagreement. In a study by McHale and Rasmussen (1998), parents of 11 month old infants in distressed

relationships more often engaged in negative coparenting behaviors, such as hostile and competitive interactions with one another and unbalanced involvement with the child. These negative coparenting behaviors were associated with increased prevalence of both externalizing symptoms (e.g. aggression) and internalizing symptoms (e.g. anxiety) according to parents' and teachers' reports during preschool. Conversely, parents in harmonious relationships were found to engage in positive coparenting behaviors, such as warmth and cooperation and behavior that promoted family integrity (e.g. showing greater affection toward one's spouse in child's presence, speaking affirmatively about one's spouse and family, even in the spouse's absence) were associated with increased family warmth and cooperation during infancy and fewer child aggressive or internalizing problems during preschool (McHale & Rasmussen, 1998). Moreover, the extent to which partners have difficulty in coparenting is subsequently predictive of the level of disruption and negativity in parent-child interactions (Floyd, Gilliom, & Costigan, 1998; Johnston, 1993). However, the ability to successfully coparent can also be an important family process by which children are exposed to positive adult interdependence and subsequent protection.

Although there are no studies to date relating coparenting to emotional security, it is anticipated that infant perceptions of the coparenting relationship are yet another way in which emotional security is assessed within the family. If couples are hostile during parenting interactions or jockey for the child's attention, emotional security is likely to be threatened if the child perceives this as undermining parents' ability to serve as protectors. However, if couples are cooperative and warm toward one another during parenting

interactions, the child is likely to perceive this as comforting because the parents are serving as a unified pair of protectors, thus maintaining the child's emotional security.

Parenting Behaviors

Another aspect of family functioning that may be enhanced or impaired by marital conflict is the parent-child relationship (e.g. Crockenberg, Leerkes, & Lekka, 2007; Du Rocher Schudlich & Cummings, 2007; Margolin, Christensen, & John, 1996; Owen & Cox, 1997; Sturge-Apple, Davies, Cicchetti, & Cummings, 2009). Family systems theory posits that discord in one area of family functioning (e.g. the marital dyad) will affect other family processes as all relationships are interdependent. More specifically, attachment theory addresses how parenting behaviors may affect infant behaviors. Secure attachments are associated with warm and sensitive parenting whereas insecure attachments are associated with inconsistent, harsh, detached and/or intrusive parenting behaviors. Securely attached infants are likely to display more positive affect, be more easily soothed, and feel comfortable exploring independently if the caregiver is nearby. Insecurely attached infants, however, display more negative affect, are difficult to soothe, and are dysregulated as a result of being unable to depend on their caregiver for their basic needs. Attachment theory's notion of the parent as a "secure base" draws a parallel to EST as infants' perception of the family as an emotionally secure or insecure entity is in part dependent upon the extent to which caregivers are emotionally available. Parenting is central to infants' perception of emotional security within the family because parents serve as a "secure base" by which infants can feel safe to explore and learn how to regulate emotions.

The link between marital distress and problems in the parent-child relationship has long been documented and is thought to be most detrimental to paternal parenting behaviors (e.g. Goldberg & Easterbrooks, 1984). Parents who are distressed, angry, or exhausted from marital conflict may be less emotionally available or sensitive to their children's needs (e.g. Gottman, Katz, & Hooven, 1996). Less sensitive parenting may also mediate the relationship between destructive marital conflict and insecure attachment (Owen & Cox, 1997), as the parent may be a source of instability or fear rather than comfort (Cummings & Davies, 1995). Several meta-analyses have reported effect sizes of .46 to .62 in linking destructive marital conflict to disrupted parenting practices (Erel & Burman, 1995; Krishnakumar & Buehler, 2000), with harsh punishment and lack of parental acceptance being the strongest associations. Destructive marital conflict also predicts coercive, intrusive (Hetherington & Clingempeel, 1992), and rejecting parenting behaviors (Fauber, Forehand, Thomas & Wierson, 1990), as well as permissive or inconsistent discipline (Stoneman, Brody, & Burke, 1989). Studies have shown that marital conflict distinctively predicts attachment security even after controlling for the predictive nature of parenting difficulty (Frosch, Mangelsdorf, & McHale, 2000).

Although to a lesser extent, the link between constructive conflict and positive parenting behaviors has also been explored. Parents who engage in more constructive conflicts with one another are more likely to utilize effective parenting strategies (e.g. maintaining positive affect, consistent discipline), which are predictive of children's positive, long-term outcomes (Cowan & Cowan, 2004). Constructive conflict has also been associated

with warm, sensitive parenting, and higher prevalence of prosocial behaviors in children ages 5 to 7 (McCoy, Cummings, & Davies, 2009).

Few studies have considered the link between parenting behaviors and emotional security. However, negative parenting behaviors have been found to mediate the association between destructive interparental conflict and emotional insecurity for sixth to eighth graders (Davies, Harold, Goeke-Morey, & Cummings, 2002). Additionally, warm, sensitive parenting was associated with increased emotional security in 5 to 7 year old children (McCoy, Cummings, & Davies, 2009). These studies, in addition to the current study, are noteworthy in that most research to date has focused on parenting behaviors as a mediator between marital conflict and children's long-term outcomes. Although no studies to date have explored parenting as a mediator between marital conflict and infant emotional security, it is likely that infants as young as three months have the ability to differentiate between positive and negative affective and behavioral cues (Kahana-Kalman & Walker-Andrews, 2001) within the context of parenting behaviors. Given infants' dependence on their parents for security and emotion regulation, the way in which the parent-child relationship is affected by conflict is likely to be especially prominent for infants as compared to older children.

Marital Conflict and Infants

Much of the support for the impact of marital discord has focused on school aged children, although some studies, to a lesser extent, have addressed outcomes for preschool children. However, little is known about the effects of marital discord on infants (Cummings, Zahn-Waxler, & Radke-Yarrow, 1981; Cummings, Zahn-Waxler, & Radke-Yarrow, 1984), despite evidence that this is the period in which marital conflict is most likely to occur

(Belsky & Rovine, 1990). Moreover, young children are especially likely to be exposed to increased levels of interparental conflict (Fantuzzo, Boruch, Beriama, & Atkins, 1997). An additional gap is that little is known about infants' reactions to live marital conflict. Previous empirical studies have assessed infants' and toddlers' reactions to conflict between experimenters (Cummings, Iannotti, & Zahn-Waxler, 1985) and simulated conflict between one parent and a stranger (Ingoldsby, Shaw, Owens, & Winslow, 1999). Other studies have employed parental reports of 10 to 20 month old infants' reactions to conflict (Cummings, Zahn-Waxler, & Radke-Yarrow, 1981), which are potentially problematic because there are not objective means to measure these behaviors. Parents that are self-reporting on their child's behaviors in response to marital conflict are also subject to reporter bias and may be less aware of their child's reactions (Du Rocher Schudlich & Lewis, 2009). The larger study from which the current one is drawn is the only study to date which has documented infant reactions to live interparental conflict (Du Rocher Schudlich, White, Flesichhauer, & Fitzgerald, 2010). Marital conflict was associated with emotional security such that infants demonstrated increased dysregulation (e.g. frustration/distress, self-soothing behaviors) in response to destructive conflict and demonstrated more positive or neutral affect and increased environment exploration in response to constructive conflict.

Although little is known about the sophistication of infant perceptions of marital conflict, the assumption that the three components of EST (representations, behavioral regulation, and emotional reactivity) are applicable to this age group is guided by developmental theory and empirical research. General support for the notion of emotional security can be found in the literature pertaining to parent-infant relationships. By three

months of age, infants' communication with parents is quite complex in that both parent and child are trying to understand one another's purpose and respond accordingly (Izard et al., 1995). Because of this, infants are likely to become emotionally reactive in response to marital conflict. Moreover, infants of this age have already developed expectations regarding parental behavior during social interactions and respond to changes in this behavior with meaningful emotional expressions (e.g. Izard et al., 1995).

Thus, in terms of the representational component of EST, although infants are unlikely to have complex internal representations of the family, they are capable of having negative family expectations as a result of exposure to marital conflict. Support for the behavioral regulation component of EST requires modification of notions of behavioral regulation to be consistent with developmental capabilities of infants. Although infants are unlikely to interfere during marital conflict as is common in older children, they are likely to try to avoid and/or attempt to ameliorate the impact of negative situations such as marital conflict. In one study, infants aged 6 to 18 months were likely to use self-soothing behaviors such as sucking and gaze aversion/avoidance in response to stressful situations (Mangelsdorf, Shapiro, & Marzolf, 1995). In another study, 12 month old infants who were overtly distressed used gaze aversion, focused their attention more on objects, and engaged in less exploration of toys (Braungart & Stifter, 1991). Finally, substantial support exists for the emotional reactivity component of EST. Since infants respond differentially in response to angry versus positive interactions (Kahana-Kalman & Walker-Andrews, 2001) and it appears that infants are disproportionately exposed to increased levels of conflict in comparison to

older children (Belsky & Rovine, 1990), the impact of marital conflict on infants' emotional security necessitates continued exploration.

Current Study and Hypotheses

Little is known regarding how parent-child relationships and coparenting behaviors may serve as possible mediators between marital conflict and infant emotional security. Guided by EST, the present study addresses the gaps in the literature by assessing infants' reactions to their parents' live marital conflict by utilizing strong observational methods to examine infant reactivity in an objective way. Moreover, the parent-child relationship and coparenting behaviors were assessed utilizing observational methods during a triadic play interaction. The primary aims of this study were as follows: (1) To assess infant emotional insecurity as measured by infants' reactions to destructive and constructive styles of interparental conflict (see Tables 2 - 7). Based on previous studies with older children (Du Rocher Schudlich & Cummings, 2003; Du Rocher Schudlich & Cummings, 2007), it is expected that infants will exhibit differential responses to conflict, with more destructive conflict by parents being associated with increased negative infant reactions. More constructive conflict is expected to be associated with positive or neutral reactions by infants; (2) To assess the mediational role of coparenting behaviors in predicting infant emotional insecurity in response to interparental conflict. Based on EST and family systems theory, it is expected that coparenting behaviors will mediate the relationship between destructive conflict and increased infant emotional insecurity. Conversely, coparenting behaviors are expected to mediate the relationship between constructive conflict and decreased infant emotional insecurity (see Tables 2 - 4); (3) To assess the mediational role of the parent-child

relationship in predicting infant emotional insecurity in response to interparental conflict. Based on EST and studies with older children (Du Rocher Schudlich & Cummings, 2003; Du Rocher Schudlich & Cummings, 2007), it is expected that parent-child relationships will mediate the relationship between destructive conflict and increased infant emotional insecurity. Conversely, parent-child relationships are expected to mediate the relationship between constructive conflict and decreased infant emotional insecurity (see Figures 1- 7).

The current study is drawn from a larger study that more broadly investigated the impact of constructive and destructive marital conflict on infant emotional security (Du Rocher Schudlich, White, Fleischhauer, & Fitzgerald, in press). There are several strengths inherent in this study including addressing the impact of marital conflict on infants, a very understudied but important population in the literature. Moreover, this study uses observational rather than self-report methods to assess infant reactions to marital conflict, coparenting, and parenting behaviors. This method reduces reporter bias such that parents have been found to be less aware of infant reactions to marital conflict than observers (Du Rocher Schudlich & Lewis, 2009). Due to little known effects of coparenting and parenting behaviors, in the current study researchers examined these processes individually to assess their respective mediational roles in the relationship between marital conflict and infant emotional insecurity. Finally, the current study is also the first to consider the impact that marital conflict has on several family processes (coparenting behaviors and parent-child processes), whereas much of the literature has focused solely on the impact of parenting.

Method

Participants

Participants were 74 nuclear families (mothers' M age = 29.56 years, SD = 5.54; fathers' M age = 31.62 years, SD = 5.87) with infants aged 6.2 to 14.48 months old (M age = 10.07 months, SD = 2.10). Forty of these infants were 6 to 9 months of age, whereas 34 of these infants were 10 to 14 months of age. Participants were recruited by contacting families listed in the Whatcom County, Washington birth records as having infants in this age range as well as families recommended by previous participants. Families were required to have been living together since the birth of the child, regardless of marital status. This requirement was established to maximize the potential for families to accurately describe their current, rather than previous, family circumstances (Lindahl, 1998). Demographic information for families was gathered using mothers' reports. Sixty-four of the parent couples (85%) were married (M length of marriage = 4.83 years, SD = 3.15 years) and were living together for an average of 5.78 years (SD = 3.34). Mothers reported having an average of 1.66 children (SD = .75). Additionally, 8.2% of mothers completed high school as their highest level of education, 38.3% attended some college or trade school, 37% held a bachelor's degree, and 16.5% held a master's degree or higher, whereas 1.4% of fathers did not complete high school, 15.1% of fathers completed high school as their highest level of education, 42.5% attended some college, 26% held a bachelor's degree, and 15% held a master's degree or higher. Mothers and fathers indicated a modal family income of \$40,000-65,000 per year. Thirty-three male infants and 41 female infants participated in this study. In this sample, 78.4% of children were Caucasian, 9.5% were biracial, 1.4% were Asian American or Pacific Islander, 5.4% indicated an ethnicity of "other," and 5.3% did not report ethnicity.

Procedures

Parents who agreed to participate were mailed consent forms and information regarding the project. Upon arriving at the laboratory, an overview of the project and procedures was again presented to the families. Parents then engaged in two videotaped interactions: a marital discussion with their infant present and a triadic play interaction.

Parents indicated separately, based on a list of common conflict topics presented to them, the three topics that were most typically problematic for their relationship. However, parents were also free to choose topics not included in this list. Upon completion of these lists, parents were then asked to collaborate and choose a topic that they would both feel comfortable discussing. Parents were asked to not discuss their children or child-related issues during this interaction as previous research suggests that this can be particularly distressing for children (Grych & Fincham, 1990). The parents were instructed to resolve their problem and to allow each person to express their perspective on the issue. Parents were instructed to discuss these topics as they would at home, for approximately seven and a half minutes each.

After completing the marital interaction, parents were asked to play with their infant in the laboratory setting for 5 minutes as they would at home. Thus, play was unstructured and left to the parents' discretion. A variety of toys were provided by the researchers for participant use. Triadic play interactions were videotaped for later coding.

During these interactions, participants were videotaped with a camera system, without the presence of research assistants. Videotaping these interactions allowed for later observational coding and analyses. Similar methods have been used in previous marital research to replicate problem-solving interactions (Mahoney, Boggio, & Jouriles, 1996).

Coding Observations of the Marital Interaction

The Marital Daily Records (MDR; Cummings, Goeke-Morey, Papp, & Dukewich, 2002) protocol was adapted to code observational video recordings of the marital interaction. The MDR coding system has sufficient convergent validity with several widely used self-report measures of marital conflict and marital relationships (see Du Rocher Schudlich & Cummings, 2003). It includes positive and negative conflict expressions and degree of positive and negative emotional intensity. Interactions were coded based on the entire interaction (approximately 7.5 minutes each).

Conflict expressions were labeled as follows: a) *conflict*, the level of tension, hostility, dissension, antagonism, or negative affect an individual displays; b) *defensiveness*, trying to avoid blame or responsibility; c) *contempt*, lack of respect, insult, mockery, or sarcasm toward one's partner; d) *withdrawal*, an avoidance of the interaction or of discussing the problem; e) *demand*, harassing or nagging one's partner; f) *communication skills*, level of appropriate and positive expressive skills; g) *support validation*, appropriate and positive listening and communication skills which convey supportiveness and understanding to the partner; h) *problem solving*, the ability to constructively define a problem and work toward a mutually satisfactory solution; and i) *humor*, trying to make a joke, finding something funny about the situation, or trying to lighten the mood, but not making fun of one's partner. For each of the behaviors, frequency and degree of behavior intensity were considered and coded on a scale from 0-9, with 0 indicating an *absence of the expression*, 3 indicating *low range levels* (e.g. a few mild instances that are brief and not intense), 5 indicating *mid-range levels* (e.g. multiple, more consistent but mild examples with 1 or 2 strong instances possible); 7

indicating *high range levels* (e.g. strong, clear, consistent examples, showing both affect and content signals); 9 indicating *intense expressions* (e.g. multiple significant, strong, intense examples, with the level of the behavior remaining high throughout the interaction). The primary revision to the original coding system consisted of lengthening the coding of behaviors to a 0-9 scale, based on the Couples' Interaction Global Coding System (Julien, Markman, Johnson, & Van Widenfelt, 1986), rather than a 0-2 scale.

The degree of emotional intensity of each of four emotions (positivity, anger, sadness, and fear) displayed by each parent during conflict was coded, with 0 indicating *absence of the emotion*, 3 indicating the *emotion is mildly expressed but kept in check*, 5 indicating that *the individual is clearly expressing the emotion*, 7 indicating that the *individual is high on the emotion and losing control of their expression*, and 9 indicating the *strongest display of emotion*, with the individual having completely lost control over expression of the emotion.

The marital dyad during the marital interaction was coded once by one of five undergraduate research assistants blind to other study and coding procedures. The coders received training by the principal investigator. A subset of 25 interactions was used to assess the coders' agreement with the principal investigator's codes for couples' marital conflict tactics, emotions, and degree of conflict resolution using Cronbach's α (Shrout & Fleiss, 1979). Coders were required to reach inter-rater reliability of .8 prior to coding independently. A subset of 20 interactions was also double-coded to assess inter-rater reliability among coders. Alphas for conflict expression variables ranged from .60 - .98, with a mean alpha of .91. Alphas were as follows for conflict expression composites: fathers'

destructive conflict ($\alpha = .85$), fathers' constructive conflict ($\alpha = .87$), mothers' destructive conflict ($\alpha = .78$), and mothers' constructive conflict ($\alpha = .88$).

Children's Reactions to Live Marital Conflict

To assess infants' reactions to actual marital interactions, infants were present during their parents' marital discussion and were videotaped for later coding. Coding was based on EST which posits that behavior and emotion regulation and dysregulation are central and observable components of emotional security for children of all ages (Cummings & Davies, 1994). Procedures are adapted from previous research on infants' responses to angry social interactions and have been used with infants and toddlers aged 10 months to 2.5 years (Cummings, Zahn-Waxler, & Radke-Yarrow, 1984). Both intensity and frequency of behaviors and emotions were coded. Codes were scored from 0 (absence of the behavior) to 4 (strong intensity and frequency of the behavior). Codes included a) *discussion preoccupation*, attention directed toward parents' discussion; b) *frustration*, expressions of anger/frustration demonstrated by a frown, furrowed brow, or screaming; c) *self-soothing*, sucking thumb, gaze aversion, rocking; d) *distress*, fussiness, sad facial and vocal expressions, or disengagement; e) *physical frustration*, angry yelling or physical aggression such as throwing objects, hitting, kicking, or biting; g) *dysregulation*, intense and or multiple and potentially conflicting emotions and behaviors in attempts to cope with conflict; h) *contentment*, smiling, laughing, cooing, expressing happiness or positive mood; and i) *play/exploration*, exploration of the environment, playing with toys.

Infants' reactions to marital conflict were coded by raters blind to other study and coding information. Coders received training from two advanced graduate students. A subset

of 25 interactions was used to assess the coders' agreement with the graduate students' codes for infant reactions using Cronbach's α (Shrout & Fleiss, 1979). Coders were required to reach inter-rater reliability of .8 prior to coding independently. A subset of 20 interactions was also double-coded to assess inter-rater reliability among coders. Alphas for infants' behaviors ranged from .84 – 1.0, with a mean alpha of .95. The emotional insecurity variables had an alpha of .72 for factors associated with increased emotional insecurity and an alpha of .40 for factors associated with decreased emotional insecurity.

Following the marital interaction, parents separately completed a dyadic interaction form (DIF) in which parents assessed their evaluations of how similar the interaction was to interactions at home. This measure is scored on a 10 point scale, ranging from 0 (not a lot) to 9 (a whole lot). Mean values for fathers' reports of interaction similarity to what they would say and do at home were 6.94 ($SD = 1.81$), were 7.07 ($SD = 1.69$) for what their partners would typically say and do, and 7.88 ($SD = 1.53$) for what their infants would typically do, indicating that fathers viewed the interactions to be fairly typical of their normal family interactions. Mean values for mothers' reports of interaction similarity to what they would say and do at home were 7.18 ($SD = 1.79$), were 7.08 ($SD = 1.86$) for what their partners would typically say and do, and 7.88 ($SD = 1.59$) for what their infants would typically do, indicating that mothers also viewed the interactions to be fairly typical of their normal family interactions.

Coding Observations of the Triadic Play Interaction

To assess the quality of coparenting behaviors and the relationship between parent-child dyads, triadic play interactions were video recorded for later coding. Both intensity and

frequency of emotions and behaviors were coded. All codes were scored from 0-4 with 0 indicating an *absence of the behavior*, 2 indicating *mixed displays of frequency or intensity of the behavior*, and 4 indicating *strong intensity and frequency of the behavior*. Coding of coparenting behaviors was conducted using selected scales from the Coparenting and Family Rating System (CFRS; McHale, 1999), including *active competition between parents* (one parent overriding the other), *verbal sparring between parents* (one parent criticizing another or observed conflict between parents), *cooperation between parents* (facilitating activities, joining), and *coparental warmth* (displays of interparental connection and affection).

Parenting and infant behaviors were coded using scales from the Qualitative Ratings for Parent-Child Interaction at 3-15 Months of Age (Cox & Crnic, 2003). Both intensity and frequency of behaviors were assessed. All codes were scored from 0-4 with 0 indicating an *absence of the behavior*, 2 indicating *mixed displays of frequency or intensity of the behavior*, and 4 indicating *strong intensity and frequency of the behavior*. Parenting codes included measures of *parental sensitivity and responsiveness* (well-timed and genuine responses to the infant's cues), *parental intrusiveness* (parent-centered agenda, behaviors that impede the infant's autonomy), *parental detachment and disengagement* (observed lack of emotional involvement with the infant), *positive regard for the infant* (expressions of physical affection, warm tone, enthusiasm about the infant), *negative regard for the infant* (observed disapproval, harsh tone, name calling), *parental animation* (energy, excitement or interest as observed in facial expression or voice), and *stimulation of infant's development* (observed degree to which the parent's primary agenda is to facilitate learning for the infant and the quality of these interactions). Child codes included *infant positive mood* (observed vocal,

facial expressions, or other behaviors of contentment, happiness or excitement) and *infant negative mood* (extent to which infant cries or fusses). In order to assess the shared parent-child experience, the coding manual also included a measure of *dyadic mutuality*, the degree to which there is synchrony and shared experience between infant and parent.

Coparenting, parent and infant behaviors were each coded once by different groups of raters blind to other study and coding information. Coders received extensive training from one of two advanced graduate students. Codes of these advanced graduate students and the principal investigator served as the standard to which the scoring of the other coders was compared for inter-rater reliability. A subset of 25 interactions was used to assess the coders' agreement with the graduate students' and principal investigator's codes using Cronbach's α (Shrout & Fleiss, 1979). Coders were required to reach inter-rater reliability of .8 prior to coding independently. A subset of 20 interactions was also double-coded to assess inter-rater reliability among coders. Alphas for inter-rater reliability for these codes ranged from .55 to .85 ($M = .68$) for mothers' parenting strategies, .55 to .78 ($M = .69$) for fathers' parenting strategies, .76 to .95 ($M = .86$) for child behaviors, and .22 to .85 ($M = .55$) for coparenting behaviors. Alphas were as follows for the data composites: negative father-child processes ($\alpha = .41$), positive father-child processes ($\alpha = .83$), negative mother-child processes ($\alpha = .56$), positive mother-child processes ($\alpha = .84$), negative coparenting strategies ($\alpha = .60$), and positive coparenting strategies ($\alpha = .56$).

Results

Data Reduction

Based on factor analyses from previous research (Du Rocher Schudlich, White, Fleischhauer, & Fitzgerald, in press) and theoretical criteria (see Cummings & Davies, 2010, for a review), couples' conflict tactics and emotions were sorted into two categories: constructive and destructive conflict patterns. Constructive patterns of conflict included problem solving, communication skills, support-validation, humor, positivity, and resolution. Destructive patterns of conflict included conflict, contempt, defensiveness, demand, observed anger, withdrawal, and observed sadness. Factor analyses and reliability coefficients analyses performed on this dataset previously indicated that anxiety did not load well onto either the destructive or constructive factors (Du Rocher Schudlich et al, in press). Consequently, they were excluded from the composites in the current study. The couples' conflict tactics were analyzed both at the individual and dyadic levels and were summed to create composites.

Supported by data from previous research (McHale, 1995), composites for positive coparenting strategies included measures of warmth and cooperation whereas negative coparenting strategies included verbal sparring and active competition. Furthermore, based upon Ainsworth's theory of attachment (Ainsworth, Blehar, Waters, & Wall, 1978), composites for parent-child processes were sorted into two categories: positive (sensitivity and responsiveness, positive regard for the infant, parental animation, stimulation of development, infant positive affect, and dyadic mutuality) and negative (parental intrusiveness, parental detachment/disengagement, negative regard for the infant, and infant negative affect). Variables were summed to create positive and negative coparenting composites.

Finally, based on EST (Davies & Cummings, 1994), infant emotional insecurity was measured on a continuum with higher scores denoting increased insecurity. Factors that increased infant emotional insecurity included measures of discussion preoccupation, frustration, physical frustration, dysregulation, and self-soothe whereas factors that countermanded infant emotional insecurity included measures of contentment and play exploration. In order to create an infant emotional insecurity composite, countermands of emotional insecurity were summed and subtracted from the total emotional insecurity score.

Descriptive Statistics

Table 1 presents means, standard deviations, possible ranges and actual ranges of dyadic conflict strategies, fathers' and mothers' conflict strategies, coparenting behaviors, fathers' and mothers' parent-child processes, and observed infant emotion insecurity scores. These data suggest that a broader range of more positive, rather than negative, behaviors were observed during the two interactions.

A one-way ANOVA analysis was conducted for behaviors considered in the emotional insecurity composite to compare means for younger infants (aged 6 to 9 months) and older infants (aged 10 to 14 months). These data suggested that comparable levels were observed for all emotional insecurity behaviors for both younger and older infants. Using a one-way ANOVA analysis, means for the behaviors considered in the emotional insecurity composite were also compared for male and female infants. These results indicated that female infants displayed significantly more discussion attending ($F = 4.33, p < .05$) and contentment ($F = 4.57, p < .04$) behaviors than male infants. The mean score for discussion attending was 2.06 ($SD = .96$) for females and 1.59 ($SD = .90$) for males. The mean score for

contentment was 2.55 ($SD = 1.15$) for females and 1.97 ($SD = 1.07$) for males. The means were comparable for all other emotional insecurity behaviors across both genders.

Data Analysis Plan

Correlational analyses.

For hypothesis 1, a series of correlations were first conducted in order to assess infant emotional insecurity in response to destructive and constructive marital conflict. These correlations are depicted in Tables 2 through 7. At the dyadic conflict level, destructive conflict strategies were significantly and positively correlated with observed infant emotional insecurity, whereas constructive conflict strategies were significantly and negatively correlated with observed infant emotional insecurity. At the individual conflict level, however, only fathers' destructive and constructive conflict strategies were significantly associated with insecurity. Fathers' destructive conflict was positively correlated with observed infant emotional insecurity, whereas fathers' constructive conflict was negatively correlated with insecurity. These results indicate that differential conflict expressions impact observed infant emotional insecurity in both negative and positive ways.

Coparenting behaviors were significantly correlated with several types of conflict expressions. Negative coparenting behaviors were positively correlated with dyadic destructive conflict. Positive coparenting behaviors were positively correlated with dyadic constructive conflict, fathers' constructive conflict, and mothers' constructive conflict. These results suggest that differential conflict expressions, especially those considered at the dyadic level, spill over into the couple's ability to parent as a unit. Coparenting behaviors were not significantly correlated with infant emotional insecurity.

Negative father-child processes and mother-child processes were both significantly and positively correlated with infant emotional insecurity. These negative parent-child processes were also significantly related to several types of conflict expressions. Negative father-child processes were significantly and positively correlated with fathers' destructive conflict. They were also significantly and negatively related to dyadic constructive conflict, fathers' constructive conflict, and mothers' constructive conflict. Negative mother-child processes were significantly and positively related to dyadic destructive conflict and fathers' destructive conflict. They were also significantly and negatively related to dyadic constructive conflict, fathers' constructive conflict, and mothers' constructive conflict. These results suggest that parenting practices that are more negative (e.g. increased intrusiveness and detachment) and less positive (e.g. decreased warmth and sensitivity) are related to increased emotional insecurity among infants. These results also suggest that differential conflict expressions spill over into parent-child relationships.

Positive parent-child processes were significantly correlated with several types of conflict expressions. Positive father-child processes were significantly and positively related to dyadic constructive conflict, fathers' constructive conflict, and mothers' constructive conflict. Positive father-child processes were significantly and negatively related to fathers' destructive conflict. Positive mother-child processes were significantly and positively related to dyadic constructive conflict, fathers' constructive conflict, and mothers' constructive conflict. Positive mother-child processes were significantly and negatively related to dyadic destructive conflict and fathers' destructive conflict. Positive parent-child processes were not

significantly correlated with infant emotional insecurity. These results also suggest that differential conflict expressions spill over into parent-child relationships.

Mediational analyses.

For hypotheses 2 and 3, a series of correlations were conducted to test which models met criteria for testing mediation. These correlations are presented in Tables 2 through 7. Based on Baron and Kenny's (1986) criteria for labeling a construct as a mediator, several conditions had to be met in the present study. Coparenting and parent-child processes could be considered for mediational tests only if all three of these conditions are met for each mediator: on the basis of zero-order correlations, a) the marital conflict predictors must be significantly correlated with the outcome, infant emotional insecurity; b) the marital conflict predictors must be significantly correlated with each mediator, coparenting behaviors and parent-child processes; and c) the mediators (coparenting behaviors and parent-child processes) must be significantly correlated with the outcome, infant emotional insecurity. If all these criteria are met, it was permissible to construct a regression model and use the standardized regression coefficients to test two additional criteria: d) the relationship between the mediators (coparenting behaviors and parent-child processes, respectively) and the marital conflict predictors and between each mediator and the infant emotional insecurity outcome variables must continue to remain significant in the regression model; and e) the introduction of each mediator (coparenting behaviors and parent-child processes), into the model must reduce prior, significant, zero-order relationships between the marital conflict predictors and the outcome (infant emotional insecurity). Researchers have further argued

that there should be a significant reduction in R^2 to fully support a mediational model (e.g. Baron & Kenny, 1986).

Seven of the possible models met criteria for mediation analyses. Figure 1 depicts the mediational role of negative mother-child processes in the relationship between dyadic destructive conflict and infant emotional insecurity. Figures 2 and 3 depict the mediational role of negative father-child processes and negative mother-child processes, respectively, in the relationship between dyadic constructive conflict and infant emotional insecurity. Figures 4 and 5 depict the mediational role of negative father-child processes and negative mother-child processes, respectively, in the relationship between fathers' destructive conflict and infant emotional insecurity. Figures 6 and 7 depict the mediational role of negative father-child processes and negative mother-child processes, respectively, in the relationship between fathers' constructive conflict and infant emotional insecurity. Pathways (a) denote original correlational associations between variables. Pathways (b) denote step 2 Beta weights for parent-child processes. Pathways (c) denote step 2 Beta weights for conflict expressions. A series of multiple regression analyses were conducted in order to determine the mediational role of parent-child processes in the relationship between marital conflict and infant emotional insecurity.

In the first model examining negative mother-child processes as a mediator between dyadic destructive conflict and infant emotional insecurity, results indicated there was not a statistically significant mediation effect (see Figure 1). Negative mother-child processes were not significantly related to infant emotional insecurity ($\beta = .22, p < .08$), although a trend was observed in the anticipated direction. Upon entering negative mother-child processes as

a mediator in the second step of the regression model, dyadic destructive conflict was no longer related to infant emotional insecurity ($\beta = .22, p < .09$). The change observed in R^2 was not significant ($R^2 = .12, \Delta R^2 = .05, p < .09$).

In the second model examining negative father-child processes as a mediator between dyadic constructive conflict and infant emotional insecurity, results indicated no significant mediation effect (see Figure 2). Negative father-child processes were not significantly related to infant emotional insecurity ($\beta = .24, p < .07$), although a trend was observed in the anticipated direction. Upon entering negative father-child processes as a mediator in the second step of the regression model, dyadic constructive conflict was no longer related to infant emotional insecurity ($\beta = -.19, p < .13$). The change observed in R^2 was not significant ($R^2 = .11, \Delta R^2 = .05, p < .07$).

In the third model examining negative mother-child processes as a mediator between dyadic constructive conflict and infant emotional insecurity, results indicated a mediation effect that was not statistically significant (see Figure 3). Negative mother-child processes were not significantly related to infant emotional insecurity ($\beta = .22, p < .09$), although a trend was observed in the anticipated direction. Upon entering negative mother-child processes as a mediator in the second step of the regression model, dyadic constructive conflict was no longer related to infant emotional insecurity ($\beta = -.18, p < .16$). The change observed in R^2 was not significant ($R^2 = .13, \Delta R^2 = .04, p < .09$).

In the fourth model examining negative father-child processes as a mediator between fathers' destructive conflict and infant emotional insecurity, results indicated a mediation effect that was not statistically significant (see Figure 4). Negative father-child processes

were not significantly related to infant emotional insecurity ($\beta = .24, p < .06$), although a trend was observed in the anticipated direction. Upon entering negative father-child processes as a mediator in the second step of the regression model, fathers' destructive conflict was no longer related to infant emotional insecurity ($\beta = .21, p < .11$). The change observed in R^2 was not significant ($R^2 = .13, \Delta R^2 = .06, p < .06$).

In the fifth model examining negative mother-child processes as a mediator between fathers' destructive conflict and infant emotional insecurity, results indicated a mediation effect that was not statistically significant (see Figure 5). Negative mother-child processes were not significantly related to infant emotional insecurity ($\beta = .22, p < .08$), although a trend was observed in the anticipated direction. Upon entering negative mother-child processes as a mediator in the second step of the regression model, fathers' destructive conflict was no longer related to infant emotional insecurity ($\beta = .21, p < .09$). The change observed in R^2 was not significant ($R^2 = .12, \Delta R^2 = .05, p < .08$).

In the sixth model examining negative father-child processes as a mediator between fathers' constructive conflict and infant emotional insecurity, results indicated a mediation effect that was not statistically significant (see Figure 6). Negative father-child processes were not significantly related to infant emotional insecurity ($\beta = .23, p < .07$), although a trend was observed in the anticipated direction. Upon entering negative father-child processes as a mediator in the second step of the regression model, fathers' constructive conflict was no longer related to infant emotional insecurity ($\beta = -.20, p < .12$). The change observed in R^2 was not significant ($R^2 = .12, \Delta R^2 = .05, p < .07$).

In the seventh model examining negative mother-child processes as a mediator between fathers' constructive conflict and infant emotional insecurity, results indicated a mediation effect that was not statistically significant (see Figure 7). Negative mother-child processes were not significantly related to infant emotional insecurity ($\beta = .22, p < .09$), although a trend was observed in the anticipated direction. Upon entering negative mother-child processes as a mediator in the second step of the regression model, fathers' constructive conflict was no longer related to infant emotional insecurity ($\beta = -.20, p < .13$). The change observed in R^2 was not significant ($R^2 = .11, \Delta R^2 = .05, p < .09$).

Regression analyses were run separately for both younger (aged 6 to 9 months) and older (10 to 14 months) infants. The regression analyses that were conducted for infants aged six to nine months did not yield different results than the analyses conducted on the full sample. However, the analyses conducted for the seven models that met criteria for mediation testing yielded slightly different results when considering only 10 to 14 month old infants.

These analyses indicated that there were significant indirect effects of parent-child processes for two of the seven models, but that there were not significant mediation effects. In the relationship between dyadic constructive conflict and infant emotional insecurity, negative father-child processes contributed statistically significant indirect effects ($\beta = .39, p < .02$). A significant change in R^2 was also observed ($R^2 = .36, \Delta R^2 = .16, p < .02$) upon entering negative father-child processes as a mediator in step 2. However, the relationship between dyadic constructive conflict and infant emotional security was still significantly related ($\beta = -.45, p < .008$). In the relationship between fathers' constructive conflict and

infant emotional insecurity, negative father-child processes also contributed statistically significant indirect effects ($\beta = .38, p < .03$). A significant change in R^2 was also observed ($R^2 = .34, \Delta R^2 = .14, p < .03$) upon entering negative father-child processes as a mediator in step 2. However, the relationship between fathers' constructive conflict and infant emotional insecurity was still significantly related ($\beta = -.43, p < .02$). Therefore, these analyses suggest that dyadic and fathers' constructive marital conflict affects infant emotional insecurity in two ways: directly and indirectly through negative father-child processes. However, it appears that negative father-child processes are not the sole explanatory mechanism for this link.

The regression analyses indicated that there were no gender differences in the seven mediation models. The regression analyses that were conducted separately for male and female infants did not reveal different results than the analyses conducted on the full sample.

Discussion

The present study is drawn from a larger study that more broadly investigated the impact of differential marital conflict on infant emotional security (Du Rocher Schudlich, White, Fleischhauer, & Fitzgerald, in press). This study was the first to use observational methods to assess infants' responses to live interparental conflict. An additional strength of this study is the focus on infants, whereas much of the literature has focused on how marital conflict impacts school-aged children. Moreover, researchers in this study used observational rather than self-report methods to assess infant reactions to marital conflict, coparenting, and parenting behaviors to reduce reporter bias, an important advance because parents have been found to be less aware of infant reactions to marital conflict than observers (Du Rocher

Schudlich & Lewis, 2009). Due to the limited research on coparenting and parenting behaviors, researchers in the current study examined these processes individually to assess their respective mediational roles in the relationship between marital conflict and infant emotional insecurity. Finally, the present study is the first to consider the impact that interparental conflict has on multiple family processes (coparenting behaviors and parent-child processes), whereas much of the literature has focused on the impact of parenting practices. The present study also includes both mothers and fathers when assessing parenting strategies, whereas the majority of past research has focused only on mothers as they are often primary caregivers for children.

Main Findings

There were several important findings from the present study. First, destructive conflict was significantly related to increased infant emotional insecurity, whereas constructive conflict was significantly related to decreased infant emotional insecurity. These findings are consistent with previous emotional security research that suggests the use of differential conflict styles for research with older children (Du Rocher Schudlich & Cummings, 2003; Du Rocher Schudlich & Cummings, 2007). This is a key finding that lends support for the notion that EST is a theory that can accurately be applied to both younger and older children. Although younger children may have more simplistic internal representations of family relationships, they may still have negative expectancies about the outcome of conflict based upon repeated exposure to conflict.

Another key aspect of the current study is that the majority of significant correlations were those that considered fathers' individual conflict expressions, rather than dyadic conflict

expressions or mothers' individual conflict expressions. This is consistent with previous research that suggests that fathers have a more significant impact during interparental conflict (Jacob & Johnson, 1997; Johnson & Jacob, 2000; Du Rocher Schudlich & Cummings, 2003). Since fathers are considered head of household in the traditional American family, it is possible that this hierarchy is conveyed either behaviorally or affectively such that children interpret their father's role in conflict to be more influential in enhancing or impairing their sense of emotional security. Alternatively, because mothers tend to be the primary caregiver for children and fathers' exchanges with children may be less frequent, fathers' interactions within the family may hold more weight due to the infrequency of their contact.

Although coparenting behaviors were related to several different conflict expressions, they were not significantly related to infant emotional insecurity. This is the first study to consider coparenting in relation to emotional security; thus, there are no other studies with which to compare these results. However, since the results suggest that marital conflict is associated with coparenting behaviors, it appears that coparenting plays an important role in these family processes, but is not an explanatory mechanism for infant security. These results are consistent with the spillover hypothesis (Engfer, 1988), which suggests that marital conflict spills over into other areas of family functioning, such as a couple's ability to parent as a unit. Alternatively, the way in which coparenting was measured in the present study may have impacted the results. Coparenting behaviors were more broadly measured than parenting behaviors, such that there were only two variables for each of the negative and positive composites. Thus, the coparenting composites were less well-measured. Moreover, the reliability for coparenting behaviors overall was lower than any other composites.

Therefore, it is possible that the lower reliability may have accounted for these results. Finally, it is also possible that coparenting behaviors may be more pronounced when measured in an interaction that induces more collaboration or strife (e.g. problem solving task). Future studies that better define coparenting behaviors and allow for fuller expressions of both negative and positive behaviors are necessary to better understand the role of coparenting in relation to marital conflict and emotional insecurity.

Parent-child processes may be an important mechanism in assessing how conflict impacts infants' emotional insecurity such that destructive and constructive conflict were associated with both negative and positive parent-child processes. While there were no significant mediation analyses in the present study, the seven models that met criteria for mediation testing (Baron & Kenny, 1986) exhibited trends in the anticipated directions. For older infants, mediational analyses from two of the models suggested that parent-child processes contributed significant indirect effects. When considering the mediational impact of the differential parent-child processes, conflict expressions were no longer a significant predictor. Baron and Kenny's (1986) approach to mediation testing is a more conservative approach than other methods (e.g. the Sobel test for mediation). It is possible that a less conservative methodology may have yielded significant results for these models. Moreover, it is possible that a larger sample size may have increased the strength of the relationships between each of the family processes. A more structured family interaction (e.g. problem solving or clean up task) may have provided better information regarding parenting practices in comparison to the unstructured play task utilized in the present study. However, these results do support the notion that parent-child processes are an important facet in

understanding these complex family dynamics. These results are consistent with the spillover hypothesis (Engfer, 1988) and other research that assesses the impact of marital conflict on parenting practices (e.g. Sturge-Apple, Davies, Cicchetti, & Cummings, 2009). Parents' ability to provide basic necessities such as safety and warm, sensitive contact may be undermined or enhanced by marital conflict.

However, negative parenting behaviors, rather than positive, were linked to infant emotional insecurity. This may be due in part to the way in which emotional insecurity was measured. The emotional insecurity composite was comprised mostly of negative behaviors, although contentment and play were also measured. Past research has focused primarily on children's long-term maladjustment and the spillover from destructive forms of marital conflict into negative parenting behaviors. Thus, the negative aspects of these family processes have been more broadly assessed. The results indicate that positive parent-child processes are not related to emotional insecurity, at least not in the way that it has been measured in the present study. Future studies are necessary to expand the positive components of emotional security to further assess the mediational role of positive parenting strategies.

Finally, in a comparison of male and female infants' responses to marital conflict, females displayed significantly more discussion attending and contentment behaviors. These results are consistent with research that suggests that preschool aged girls are less likely than boys to express anger (Brody, 1999; Saarni, 1984) and are more likely to exhibit behaviors that support relationships (Zahn-Waxler, 2001). Given this information, it is not surprising that even young females display more positive behaviors and are more likely to attend to

communication behaviors than male infants. Future studies are necessary to expand on these findings to better assess the role that age and gender plays in infant responses to marital conflict.

Implications

The current study has several implications with regard to children's long-term adjustment as a result of exposure to marital conflict. The link between repeated exposure to conflict and adjustment difficulties in children has been well-supported in the literature (Cummings & Davies, 2010; Rhoades, 2008). Children who repeatedly witness marital conflict often exhibit externalizing difficulties, such as heightened aggression and noncompliance (Cummings, Goeke-Morey, & Papp, 2004; Rhoades, 2008) and are more likely to also experience internalizing disorders, such as depression and somatic complaints (Davies & Cummings, 1998; Rhoades, 2008). Infants' short-term, negative reactions during conflict, such as those seen in the current study, may have long-term implications for adjustment.

Results of this study highlight the importance of disseminating to clinicians and the community the significance of managing interparental conflict in appropriate, well-modulated ways. Special emphasis should be placed upon the implementation of effective conflict strategies. Although community programs currently exist that emphasize interparental conflict education for parents of older children (Cummings, Faircloth, Mitchell, Cummings, & Schermerhorn, 2008), programs aimed at much younger children are essential to prevent problems from developing at the time when children are at the highest risk (Fantuzzo et al., 1997). Moreover, emphasis should be placed upon the use of effective

coparenting and parenting strategies, especially when destructive marital conflict exists in the home. Therapeutic interventions, such as couples' counseling and parenting curriculums, are aimed at increasing parents' ability to effectively parent as a unit and to strengthen the parent-child relationship. Fathers should be strongly encouraged to participate in these interventions since they may have an especially influential role in these family processes. Such interventions may increase parents' ability to warmly and sensitively respond to their infants, decrease infant distress and dysregulation, and possibly decrease long-term maladjustment.

Limitations and Future Directions

Although there are several key strengths inherent in the present study, there were also several limitations. The correlational nature of the present study excludes determination of causality for these findings. There was low inter-rater reliability for some of the codes, primarily for coparenting behaviors. Coparenting composites were less well measured, with only two codes for each of the negative and positive composites. Lower reliability for these codes may in part impact the finding that coparenting behaviors were an important, but not explanatory mechanism in the relationship between conflict expressions and emotional insecurity. Thus, these results should be replicated with more complex coparenting composites that measure a wider variety of behaviors and assess parents' individual contributions to coparenting dynamics.

Due to the young age of participants, only two of the three components of EST were examined. Despite analysis of infants' behavioral and affective responses to marital conflict, researchers in the present study were unable to assess infants' internal representations of

relations within the family. Although these reactions are likely the result of underlying emotional security or insecurity, it is possible that they are merely the result of circumstantial responses to the environment. Longitudinal research is needed to assess these family processes over time.

Moreover, there are some limitations regarding the sample used in the present study. The limited sample size ($N = 74$) may account for the lack of significant meditational analyses, despite the trends observed in the anticipated directions. The participants in the present study were a community rather than clinical sample. Therefore, the family processes observed in this study may be different for families seeking couples or family therapy. The sample was also comprised of primarily white families of middle to middle upper socioeconomic status. Thus, the present study cannot be generalized to families that are ethnically and economically diverse. Future studies are needed to assess these family processes within low income and ethnic minority families.

Finally, limitations inherent in using laboratory observational methods were also considered. Although these methods are highly correlated with family dynamics in the home, the videotaped, laboratory setting may limit the family's expression of more negative conflict and parenting behaviors. Replication of these results would be useful in natural, home settings to assess the full range of these processes.

References

- Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Oxford, England: Lawrence Erlbaum.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. DOI: 10.1037/0022-3514.51.6.1173
- Belsky, J., & Rovine, M. (1990). Patterns of marital change across the transition to parenthood: Pregnancy to three years post-partum. *Journal of Marriage and Family*, *52*, 5-19. DOI: 10.2307/352833
- Braungart J. M., & Stifter, C. A. (1991). Regulation of negative reactivity during the strange situation: Temperament and attachment in 12-month-old infants. *Infant Behavior & Development*, *14*(3), 349-364. DOI: 10.1016/0163-6383(91)90027-P
- Brody, L. R. (1999). *Gender, emotion, and the family*. Cambridge, MA: Harvard University Press.
- Cox, M. J., & Crnic, K. (2003). Qualitative ratings for parent-child interaction at 3-15 months of age. Bethesda, MD: NICHD SECCYD.
- Cox, M. J., & Brooks-Gunn, J. (1999). *The advances in family research series*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Crockenberg, S. C., Leerkes, E. M., & Lekka, S. K. (2007). Pathways from marital aggression to infant emotion regulation: The development of withdrawal in infancy. *Infant Behavior and Development*, *30*, 97-113. DOI: 10.1016/j.infbeh.2006.11.009

- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to expressions of anger and affection by others in the family. *Child Development, 52*, 1274-1282. DOI: 10.2307/1129516
- Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1984). Developmental changes in children's reactions to anger in the home. *Journal of Child Psychology, 25*(1), 63-74. DOI: 10.1111/j.1469-7610.1984.tb01719.x
- Cummings, E. M., Iannotti, R.J., & Zahn-Waxler, C. (1985). Influence of conflict between adults on the emotions and aggression of young children. *Developmental Psychology, 21*(3), 495-507. DOI: 10.1037/0012-1649.21.3.495
- Cummings, E. M., Ballard, M., El-Shiek, M., & Lake, M. (1991). Resolution and children's responses to interadult anger. *Developmental Psychology, 27*(3), 462-470. DOI: 10.1037/0012-1649.27.3.462
- Cummings, E. M., & Davies, P. T. (1995). The impact of parents on their children: An emotional security perspective. In R. Vasta (Ed.), *Annals of child development: A research annual*, (pp. 167-208). London, England: Jessica Kingsley Publishers.
- Cummings, E. M., & Davies, P. T. (2002). Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry, 43*, 31-63. DOI: 10.1111/1469-7610.00003
- Cummings, E. M., Goeke-Morey, M.C., & Papp, L. M. (2002). A family-wide model for the role of emotion in family functioning. *Marriage & Family Review, 34*(1), 13-34. DOI: 10.1300/J002v34n01_02
- Cummings, E. M., Goeke-Morey, M. C., Papp, L. M., & Dukewich, T. L. (2002).

- Children's responses to mothers' and fathers' emotionality and tactics in marital conflict in the home. *Journal of Family Psychology*, 16(4), 478-492. DOI: 10.1037/0893-3200.16.4.478
- Cummings, E. M., Schermerhorn, A. C., Davies, P. T., Goeke-Morey, M. C., & Cummings, J. S. (2006). Interparental discord and child adjustment: Prospective investigations of emotional security as an explanatory mechanism. *Child Development*, 77(1), 132-152. DOI: 10.1111/j.1467-8624.2006.00861.x
- Cummings, E. M., & Davies, P. T. (2010). Marital conflict and children: An emotional security perspective. New York, NY: The Guilford Press.
- Cowan, P.A., & Cowan, C. P. (2004). From family relationships to peer rejection to antisocial behavior in middle school. In J. B. Kupersmidt, & K. A. Dodge (Eds.), *Children's peer relations: From development to intervention*, (pp. 159-177). Washington, DC, US: American Psychological Association.
- Davies, P. T., & Cummings, E. M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin*, 116(3), 387-411. DOI: 10.1037/0033-2909.116.3.387
- Davies, P. T., Myers, R. L., & Cummings, E. M. (1996). Responses of children and adolescents to marital conflict scenarios as a function of the emotionality of conflict endings. *Merrill-Palmer Quarterly*, 42(1), 1-21.
- Davies, P. T., Myers, R. L., Cummings, E. M., & Heindel, S. (1999). Adult conflict

- history and children's subsequent responses to conflict: An experimental test. *Journal of Family Psychology*, *13*(4), 610-628. DOI: 10.1037/0893-3200.13.4.610
- Davies, P. T., Harold, G. T., Goeke-Morey, M. C., & Cummings, E. M. (2002). Child emotional security and interparental conflict. *Monographs of the Society for Research in Child Development*, *67*(3), 7-8. DOI: 10.1111/1540-5834.00205
- Davies, P. T., Sturge-Apple, M. L., Winter, M. A., Cummings, E. M., & Farrell, D. (2006). Child adaptational development in contexts of interparental conflict over time. *Child Development*, *77*(1), 218-233. DOI: 10.1111/j.1467-8624.2006.00866.x
- Du Rocher Schudlich, T. D., & Cummings, E. M. (2003). Parental dysphoria and children's internalizing symptoms: Marital conflict styles as mediators of risk. *Child Development*, *74*(6), 1663-1681. DOI: 10.1046/j.1467-8624.2003.00630.x
- Du Rocher Schudlich, T. D., Shamir, H., & Cummings, E. M. (2004). Marital conflict, children's representations of family relationships, and children's dispositions towards peer conflict strategies. *Social Development*, *13*(2), 171-192. DOI: 10.1111/j.1467-9507.2004.000262.x
- Du Rocher Schudlich, T. D., & Cummings, E. M. (2007). Parental dysphoria and children's adjustment: Marital conflict styles, children's emotional security, and parenting as mediators of risk. *Journal of Abnormal Child Psychology*, *35*, 627-639. DOI: 10.1007/s10802-007-9118-3
- Du Rocher Schudlich, T.D., & Lewis, A. (2009). Interparental Conflict and Child

- Adjustment: An Exploration of Mediating and Moderating Processes. Round table presentation at the Association for Counselor Education and Supervision Annual Conference, San Diego.
- Du Rocher Schudlich, T. D., White, C., Fleischhauer, E. A., & Fitzgerald, K. A. (in press). *Journal of Marriage and Family*.
- Easterbrooks, M. A., Cummings, E. M., & Emde, R. N. (1994). Young children's responses to constructive marital disputes. *Journal of Family Psychology, 8*(2), 160-169. DOI: 10.1037/0893-3200.8.2.160
- Engfer, A. (1988). The interrelatedness of marriage and the mother-child relationship. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences*, (pp. 105-118). Oxford, UK: Clarendon.
- Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*(1), 108-132. DOI: 10.1037/0033-2909.118.1.108
- Fantuzzo, J., Boruch, R., Beriama, A., & Atkins, M. (1997). Domestic violence and children: Prevalence and risk in five major U.S. cities. *Journal of American Academic of Child & Adolescent Psychiatry, 36*(1), 116-122. DOI: 10.1097/00004583-199701000-00025
- Fauber, R., Forehand, R., Thomas, A. M., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent adjustment in intact and divorced families: The role of disrupted parenting. *Child Development, 61*(4), 1112-1123. DOI: 10.2307/1130879

- Floyd, F.J., Gilliom, L. A., & Costigan, C. L. (1998). Marriage and the parenting alliance: Longitudinal prediction of change in parenting perceptions and behaviors. *Child Development, 69*(5), 1461-1479. DOI: 10.2307/1132278
- Frosh, C. A., Mangelsdorf, S. C., & McHale, J. L. (2000). Marital behavior and the security of preschooler-parent attachment relationships. *Journal of Family Psychology, 14*(1), 144-161. DOI: 10.1037/0893-3200.14.1.144
- Goeke-Morey, M. C., Cummings, E. M., Harold, G. T., & Shelton, K. H. (2003). Categories and continua of destructive and constructive marital conflict tactics from the perspective of U.S. and Welsh children. *Journal of Family Psychology, 17*(3), 327-338. DOI: 10.1037/0893-3200.17.3.327
- Goldberg, W. A., & Easterbrooks, M. A. (1984). Role of marital quality in toddler development. *Developmental Psychology, 20*(3), 504-514. DOI: 10.1037/0012-1649.20.3.504
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*(3), 243-268. DOI: 10.1037/0893-3200.10.3.243
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin, 108*(2), 267-290. DOI: 10.1037/0033-2909.108.2.267
- Hetherington, E. M., & Clingempeel, W. G. (1992). Coping with marital transitions: A family systems perspective. *Monographs of the Society for Research in Child Development, 57*(2-3), 1-242. DOI: 10.2307/1166050

- Holden, G. W., & Ritchie, K. L. (1991). Linking extreme marital discord, child rearing, and child behavior problems: Evidence from battered women. *Child Development*, 62, 311-327. DOI: 10.2307/1131005
- Ingoldsby, E. M., Shaw, D. S., Owens, E. B., & Winslow, E. B. (1999). A longitudinal study of interparental conflict, emotional and behavioral reactivity, and preschoolers' adjustment problems among low-income families. *Journal of Abnormal Child Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 27(5), 343-356. DOI: 10.1023/A:1021971700656
- Izard, C. E., Fantuzzo, C.A., Castle, J. M., Haynes, O. M., Rayias, M. F., & Putnam, P. H. (1995). The ontogeny and significance of infants' facial expressions in the first 9 months of life. *Developmental Psychology*, 31(6), 997-1013. DOI: 10.1037/0012-1649.31.6.997
- Jacob, T., & Johnson, S. (1997). Parent-child interaction among depressed fathers and mothers: Impact on child functioning. *Journal of Family Psychology*, 11(4), 391-409. DOI: 10.1037/0893-3200.11.4.391
- Jenkins, J. M., & Smith, M. A. (1991). Marital disharmony and children's behaviour problems: Aspects of a poor marriage that affect children adversely. *Journal of Child Psychology and Psychiatry*, 32(5), 793-810. DOI: 10.1111/j.1469-7610.1991.tb01903.x
- Johnson, S., & Jacob, T. (2000). Sequential interactions in the marital communication of depressed men and women. *Journal of Consulting and Clinical Psychology*, 68(1), 4-12. DOI: 10.1037/0022-006X.68.1.4

- Johnston, J. R., Gonzalez, R., & Campbell, L. E. (1987). Ongoing postdivorce conflict and child disturbance. *Journal of Abnormal Child Psychology*, *15*(4), 493-509. DOI: 10.1007/BF00917236
- Johnston, J. R. (1993). Family transitions and children's functioning: The case of parental conflict and divorce. In *Family, self, and society: Toward a new agenda for family research*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Julien, D., Markman, H. J., Lindahl, K. M., Johnson, H. M., & Van Widenfelt, B. (1987). Interactional dimensions coding system. Denver, CO: University of Denver, Denver Center for Marital and Family Studies.
- Kahana-Kalman, R., & Walker-Andrews, A. S. (2001). The role of person familiarity in young infants' perception of emotional expressions. *Child Development*, *72*(2), 352-369. DOI: 10.1111/1467-8624.00283
- Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviors: A meta-analytic review. *Family Relations*, *49*(1), 25-44.
- Lindahl, K. M. (1998). Family process variables and children's disruptive behavior problems. *Journal of Family Psychology*, *12*(3), 420-436. DOI: 10.1037/0893-3200.12.3.420
- Mahoney, A., Boggio, R.M., & Jouriles, E. N. (1996). Effects of verbal marital conflict on subsequent mother-son interactions in a child clinical sample. *Journal of Clinical Child Psychology*, *25*(3), 262-271. DOI: 10.1207/s15374424jccp2503_2
- Mangelsdorf, S. C., Shapiro, J. R., & Marzolf, D. (1995). Developmental and

- temperamental differences in emotional regulation in infancy. *Child Development*, 66(6), 1817-1828. DOI: 10.2307/1131912
- Margolin, G., Christensen, A., & John, R. S. (1996). The continuance and spillover of everyday tensions in distressed and nondistressed families. *Journal of Family Psychology*, 10(3), 304-321. DOI: 10.1037/0893-3200.10.3.304
- McCoy, K., Cummings, E. M., & Davies, P. T. (2009). Constructive and destructive marital conflict, emotional security and children's prosocial behavior. *Journal of Child Psychology and Psychiatry*, 50(3), 270-279. DOI: 10.1111/j.1469-7610.2008.01945.x
- McHale, J. P. (1995). Coparenting and triadic interactions during infancy: The roles of marital distress and child gender. *Developmental Psychology*, 31(6), 985-996. DOI: 10.1037/0012-1649.31.6.985
- McHale, J. P., & Rasmussen, J. L. (1998). Coparental and family group-level dynamics during infancy: Early family precursors of child and family functioning during preschool. *Development and Psychopathology*, 10, 39-59. DOI: 10.1017/S0954579498001527
- McHale, J. P. (1999). Coparenting and family ratings: Toddler age and above. Worcester, MA: Clark University.
- Minuchin, S. (1974). *Families & family therapy*. Oxford, England: Harvard University Press.
- Owen, M. T., & Cox, M. J. (1997). Marital conflict and the development of infant-parent attachment relationships. *Journal of Family Psychology*, 11(2), 152-164. DOI:

10.1037/0893-3200.11.2.152

- Rhoades, K. A. (2008). Children's responses to interparental conflict: A meta-analysis of their associations with child adjustment. *Child Development, 79*, 1942-1956. DOI: 10.1111/j.1467-8624.2008.01235.x
- Saarni, C. (1984). An observational study of children's attempts to monitor their expressive behavior. *Child Development, 55*, 1504-1513. DOI: 10.2307/1130020
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin, 86*(2), 420-428. DOI: 10.1037/0033-2909.86.2.420
- Stoneman, Z., Brody, G. H., & Burke, M. (1989). Marital quality, depression, and inconsistent parenting: Relationship with observed mother-child conflict. *American Journal of Orthopsychiatry, 59*(1), 105-117. DOI: 10.1111/j.1939-0025.1989.tb01639.x
- Sturge-Apple, M. L., Davies, P. T., Cicchetti, D., & Cummings, E. M. (2009). The role of mothers' and fathers' adrenocortical reactivity in spillover between interparental conflict and parenting practices. *Journal of Family Psychology, 23*(2), 215-225. DOI: 10.1037/a0014198
- Zahn-Waxler, C. (2001). The development of empathy, guilt, and internalization of distress: Implications for gender differences in internalizing and externalizing problems. In R. Davidson (Ed.), *Anxiety, depression, and emotion regulation and dysregulation* (pp. 243-272). Cambridge, England: Cambridge University Press.

Table 1

Descriptive Statistics for All Variables

Conflict, Coparenting Behaviors, and Parent-Child Processes (N = 74)				
Variables	Mean	Std. Deviation	Actual Range	Possible Range
Dyadic Destructive Conflict	35.62	14.49	14 – 81	0 – 126
Fathers' Destructive Conflict	17.01	8.11	7 - 43	0 – 63
Conflict	3.71	2.02	1 – 9	0 – 9
Defensiveness	3.62	2.03	1 – 9	0 – 9
Contempt	2.34	1.92	1 – 8	0 – 9
Withdrawal	1.84	1.18	1 – 6	0 – 9
Demand	1.68	1.11	1 – 6	0 – 9
Anger	2.34	1.55	1 – 8	0 – 9
Sadness	1.50	1.02	1 – 6	0 – 9
Mothers' Destructive Conflict	18.74	7.88	7 - 38	0 – 63
Conflict	3.88	2.02	1 – 8	0 – 9
Defensiveness	3.94	2.14	1 – 8	0 – 9
Contempt	2.56	1.97	1 – 7	0 – 9
Withdrawal	1.87	1.37	1 – 7	0 – 9
Demand	2.09	1.32	1 – 7	0 – 9
Anger	2.37	1.50	1 – 7	0 – 9
Sadness	2.03	1.50	1 – 6	0 – 9
Dyadic Constructive Conflict	59.04	17.64	23 – 88	0 – 108
Fathers' Constructive Conflict	29.72	9.05	10 - 46	0 – 54
Positive affect	5.19	1.78	2 – 9	0 – 9
Communication skills	6.01	2.00	1 – 9	0 – 9
Support	5.22	2.02	2 – 9	0 – 9
Problem solving	5.82	2.07	2 – 9	0 – 9
Humor	2.06	1.23	1 – 6	0 – 9
Resolution	5.41	2.36	1 – 9	0 – 9
Mothers' Constructive Conflict	29.32	9.41	11 – 47	0 – 54
Positive affect	5.34	1.83	2 – 9	0 – 9
Communication skills	5.82	1.93	2 – 9	0 – 9
Support	5.09	2.09	2 – 9	0 – 9
Problem solving	5.60	2.21	2 – 9	0 – 9
Humor	2.03	1.13	1 – 6	0 – 9
Resolution	5.44	2.42	1 – 9	0 – 9
Infant Emotional Insecurity	-.84	4.62	-7 – 16	-8 – 24
Discussion attending	1.81	.95	0 – 4	0 – 4
Frustration	.59	1.02	0 – 4	0 – 4
Self soothe	.76	1.21	0 – 4	0 – 4
Distress	1.00	1.17	0 – 4	0 – 4
Dysregulation	.25	.72	0 – 4	0 – 4
Physical frustration	.10	.43	0 – 2	0 – 4
Contentment	2.24	1.13	0 – 4	0 – 4

Play and exploration	3.12	1.06	0 – 4	0 – 4
Negative Coparenting Behaviors	2.48	2.34	0 – 8	0 – 8
Verbal sparring	1.20	1.44	0 – 4	0 – 4
Competition	1.28	1.32	0 – 4	0 – 4
Positive Coparenting Behaviors	3.83	1.56	2 – 8	0 – 8
Warmth	1.65	.76	0 – 4	0 – 4
Cooperation	2.18	1.09	1 – 4	0 – 4
Fathers' Negative Parent-Child	3.97	2.55	0 – 10	0 – 16
Intrusiveness	1.39	1.27	0 – 4	0 – 4
Detachment	1.18	1.15	0 – 4	0 – 4
Negative regard	.37	.64	0 – 2	0 – 4
Negative child affect	1.03	1.07	0 – 4	0 – 4
Mothers' Negative Parent-Child	4.04	2.71	0 – 11	0 – 16
Intrusiveness	1.46	1.17	0 – 4	0 – 4
Detachment	1.17	1.12	0 – 4	0 – 4
Negative regard	.39	.69	0 – 3	0 – 4
Negative child affect	1.03	1.07	0 – 4	0 – 4
Fathers' Positive Parent-Child	11.61	4.36	1 – 22	0 – 24
Sensitivity	1.85	1.08	0 – 4	0 – 4
Positive regard	2.31	1.04	0 – 4	0 – 4
Animation	2.03	.96	0 – 4	0 – 4
Stimulation of development	1.65	.88	0 – 4	0 – 4
Dyadic mutuality	1.80	1.02	0 – 4	0 – 4
Child positive affect	1.97	.94	0 – 4	0 – 4
Mothers' Positive Parent-Child	12.76	4.41	2 – 22	0 – 24
Sensitivity	2.06	1.08	0 – 4	0 – 4
Positive regard	2.65	.94	1 – 4	0 – 4
Animation	2.21	.86	0 – 4	0 – 4
Stimulation of development	1.96	1.02	0 – 4	0 – 4
Dyadic mutuality	1.94	1.07	0 – 4	0 – 4
Child positive affect	1.97	.94	0 – 4	0 – 4

Table 2

Intercorrelations between Dyadic Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Coparenting Behaviors

Variables	Conflict, Emotional Insecurity, and Coparenting Behaviors (<i>N</i> = 74)				
	Dyadic	Dyadic	Emotional	Negative	Positive
	Destructive	Constructive	Insecurity	Coparenting	Coparenting
	Conflict	Conflict			
Dyadic Destructive Conflict	--	-.76**	.27*	.24*	-.18
Dyadic Constructive Conflict	-.76**	--	-.25*	-.17	.26*
Emotional Insecurity	.27*	-.25*	--	.22	-.08
Negative Coparenting	.24*	-.17	.22	--	.30*
Positive Coparenting	-.18	.26*	-.08	.30*	--

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

Table 3

Intercorrelations between Fathers' Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Coparenting Behaviors

Conflict, Emotional Insecurity, and Coparenting Behaviors (<i>N</i> = 74)					
Variables	Fathers' Destructive Conflict	Fathers' Constructive Conflict	Emotional Insecurity	Negative Coparenting	Positive Coparenting
Fathers' Destructive Conflict	--	-.72**	.27*	.21	-.17
Fathers' Constructive Conflict	-.72**	--	-.26*	-.14	.25*
Emotional Insecurity	.27*	-.26*	--	.22	.10
Negative Coparenting	.21	-.14	.22	--	-.30*
Positive Coparenting	-.17	.25*	.10	-.30*	--

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

Table 4

Intercorrelations between Mothers' Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Coparenting Behaviors

Variables	Conflict, Emotional Insecurity, and Coparenting Behaviors (<i>N</i> = 74)				
	Mothers'	Mothers'	Emotional	Negative	Positive
	Destructive	Constructive	Insecurity	Coparenting	Coparenting
	Conflict	Conflict			
Mothers' Destructive Conflict	--	-.75**	.19	.23	-.18
Mothers' Constructive Conflict	-.75**	--	-.22	-.18	.24*
Emotional Insecurity	.19	-.22	--	.22	-.10
Negative Coparenting	.23	-.18	.22	--	-.30*
Positive Coparenting	-.18	.24*	-.10	-.30*	--

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

Table 5

Intercorrelations between Dyadic Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Parent-Child Processes

Variables	Conflict, Emotional Insecurity, and Parent-Child Processes ($N = 74$)						
	Dyadic	Dyadic	Emotional	Negative	Negative	Positive	Positive
	Destructive	Constructive	Insecurity	Father-Child	Mother-Child	Father-Child	Mother-Child
	Conflict	Conflict					
Dyadic Destructive Conflict	--	-.76**	.27*	.23	.27*	.18	-.26*
Dyadic Constructive Conflict	-.76**	--	-.25*	-.30*	-.33**	.31*	.37**
Emotional Insecurity	.27*	-.25*	--	.28*	.28*	-.06	-.13
Negative Father-Child	.23	-.30*	.28*	--	-.68**	-.57**	-.42**
Negative Mother-Child	.27*	-.33*	.28*	.66**	--	-.30	-.68**
Positive Father-Child	.18	.31*	-.06	-.57**	-.30*	--	.47**
Positive Mother-Child	-.26*	.37**	-.13	-.42**	.66**	.47**	--

* $p < .05$; ** $p < .01$.

Table 6

Intercorrelations between Fathers' Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Parent-Child Processes

Conflict, Emotional Insecurity, and Parent-Child Processes (<i>N</i> = 74)							
Variables	Fathers' Destructive Conflict	Fathers' Constructive Conflict	Emotional Insecurity	Negative Father-Child	Negative Mother-Child	Positive Father-Child	Positive Mother-Child
Fathers' Destructive Conflict	--	-.72**	.27*	.33**	.26*	-.28*	-.29*
Fathers' Constructive Conflict	-.72**	--	-.26*	-.30*	-.29*	.35**	.38**
Emotional Insecurity	.27*	-.26*	--	.28*	.28*	-.06	-.13
Negative Father-Child	.33**	-.30*	.28*	--	.66**	-.59**	-.42**
Negative Mother-Child	.26*	-.29*	.28*	.66**	--	-.30*	-.68**
Positive Father-Child	-.28*	.35**	-.06	-.59**	-.30*	--	.47**
Positive Mother-Child	-.29*	.38**	-.13	-.42**	-.68**	.47**	--

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

Table 7

Intercorrelations between Mothers' Marital Conflict Expressions, Observed Infant Emotional Insecurity, and Parent-Child Processes

Conflict, Emotional Insecurity, and Parent-Child Processes (<i>N</i> = 74)							
Variables	Mothers' Destructive Conflict	Mothers' Constructive Conflict	Emotional Insecurity	Negative Father-Child	Negative Mother-Child	Positive Father-Child	Positive Mother-Child
Mothers' Destructive Conflict	--	-.75**	.19	.10	.23	-.08	-.16
Mothers' Constructive Conflict	-.75**	--	-.22	-.28*	-.34**	.24*	.34**
Emotional Insecurity	.19	-.22	--	.28*	.28*	-.06	-.13
Negative Father-Child	.10	-.28*	.28*	--	.66**	-.59**	-.42**
Negative Mother-Child	.23	-.34**	.28*	.66**	--	-.30*	-.68**
Positive Father-Child	-.08	.24*	-.06	-.59**	-.30	--	.47**
Positive Mother-Child	-.16	.34**	-.13	-.42**	-.68**	.47**	--

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

Table 8

Mediation Analyses for Parent-Child Processes

Variables	β	R ²	ΔR^2
Model 1			
<i>Step 1:</i>			
Dyadic Destructive Conflict	.27*	.07	.07*
<i>Step 2:</i>			
Dyadic Destructive Conflict	.22	.12	.05 [†]
Neg. Mother-Child Processes	.22 [†]		
Model 2			
<i>Step 1:</i>			
Dyadic Constructive Conflict	-.25*	.06	.06*
<i>Step 2:</i>			
Dyadic Constructive Conflict	-.19	.11	.05 [†]
Neg. Father-Child Processes	.24 [†]		
Model 3			
<i>Step 1:</i>			
Dyadic Constructive Conflict	-.25*	.06	.06*
<i>Step 2:</i>			
Dyadic Constructive Conflict	-.18	.11	.04 [†]
Neg. Mother-Child Processes	.22 [†]		
Model 4			
<i>Step 1:</i>			
Fathers' Destructive Conflict	.27*	.07	.07*
<i>Step 2:</i>			
Fathers' Destructive Conflict	.21	.13	.06 [†]
Neg. Father-Child Processes	.24 [†]		
Model 5			
<i>Step 1:</i>			
Fathers' Destructive Conflict	.27*	.07	.07*
<i>Step 2:</i>			
Fathers' Destructive Conflict	.22	.12	.05 [†]
Neg. Mother-Child Processes	.22 [†]		
Model 6			
<i>Step 1:</i>			
Fathers' Constructive Conflict	-.26*	.07	.07*
<i>Step 2:</i>			
Fathers' Constructive Conflict	-.20	.12	.05 [†]
Neg. Father-Child Processes	.23 [†]		
Model 7			
<i>Step 1:</i>			
Fathers' Constructive Conflict	-.26*	.07	.07*
<i>Step 2:</i>			
Fathers' Constructive Conflict	-.20	.11	.05 [†]
Neg. Mother-Child Processes	.22 [†]		

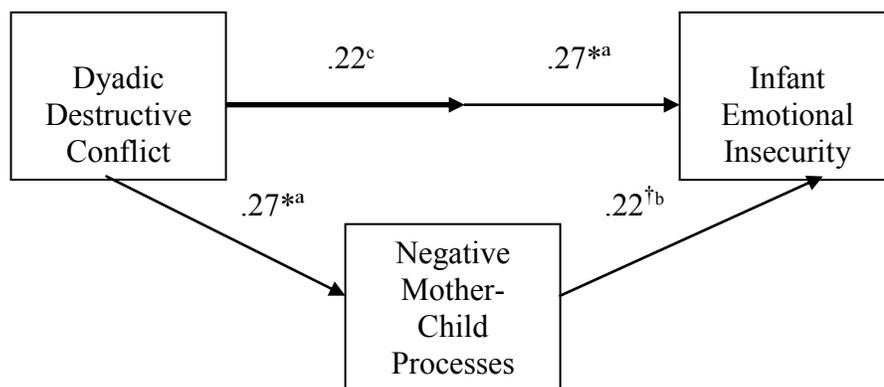


Figure 1. Mediation role of negative mother-child processes.
† $p < .09$, * $p < .05$; ** $p < .01$.

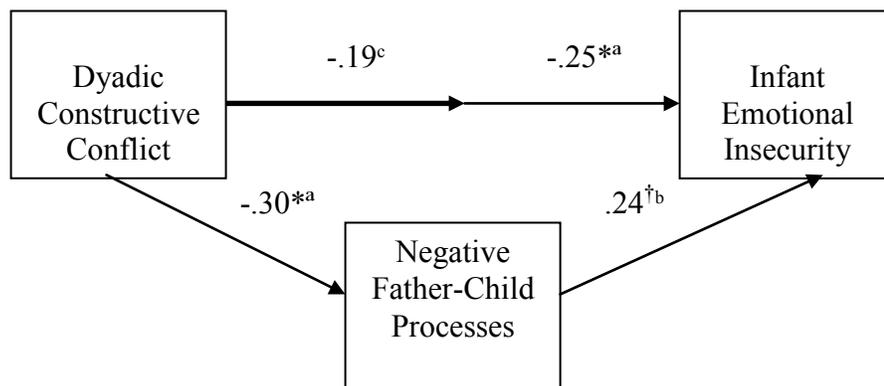


Figure 2. Mediational role of negative father-child processes.

[†] $p < .09$, * $p < .05$; ** $p < .01$.

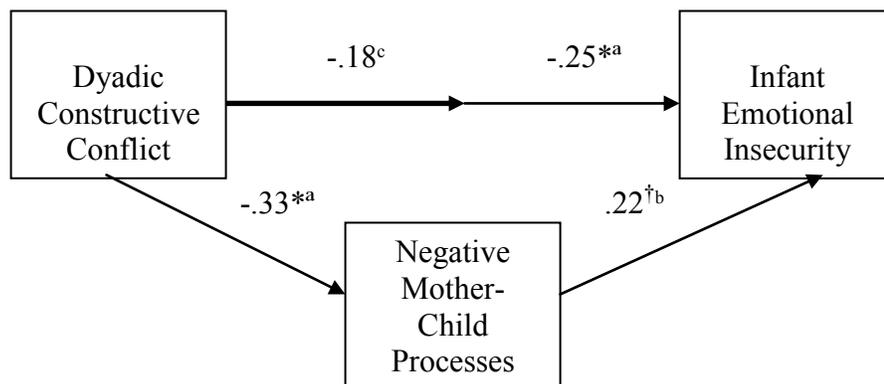


Figure 3. Mediational role of negative mother-child processes.
 $^{\dagger} p < .09$, $* p < .05$; $** p < .01$.

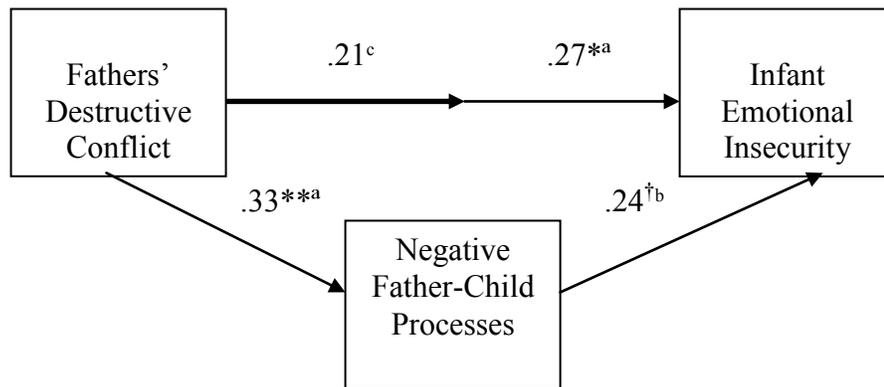


Figure 4. Mediational role of negative father-child processes.
 $^{\dagger} p < .09$, $* p < .05$; $** p < .01$.

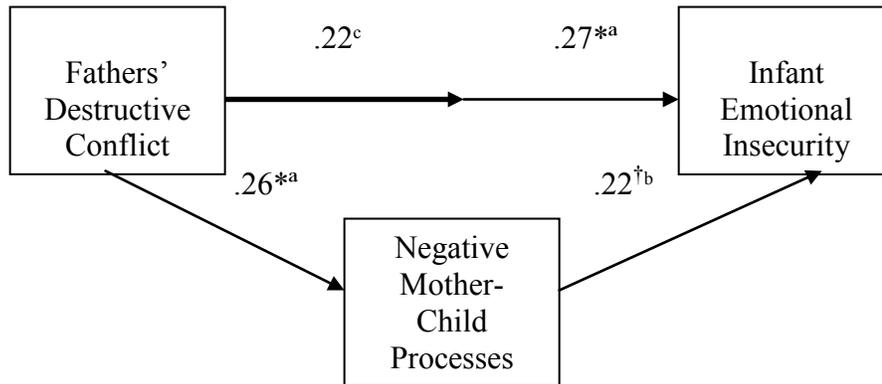


Figure 5. Mediational role of negative mother-child processes.
† $p < .09$, * $p < .05$; ** $p < .01$.

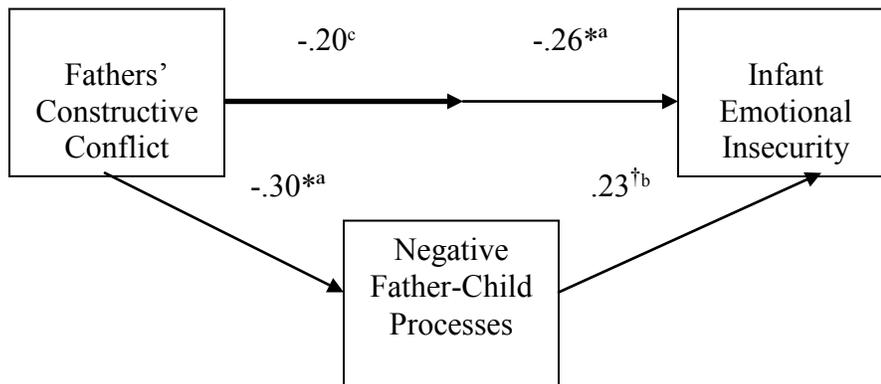


Figure 6. Mediational role of negative father-child processes.

$^{\dagger}p < .09$, $*p < .05$; $**p < .01$.

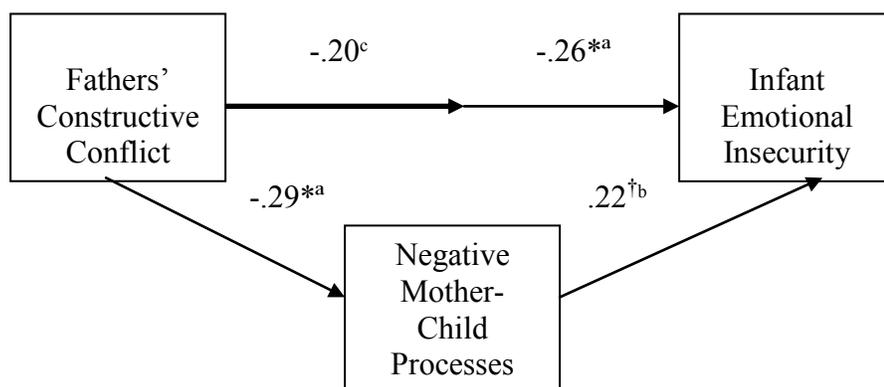


Figure 7. Mediational role of negative mother-child processes.

$^{\dagger}p < .09$, $*p < .05$; $**p < .01$.