

Marital Conflict and Child Adjustment: An Emotional Security Hypothesis

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An emotional security hypothesis that builds on attachment theory is proposed to account for recent empirical findings on the impact of marital conflict on children and to provide directions for future research. Children's concerns about emotional security play a role in their regulation of emotional arousal and organization and in their motivation to respond in the face of marital conflict. Over time these response processes and internalized representations of parental relations that develop have implications for children's long-term adjustment. Emotional security is seen as a product of past experiences with marital conflict and as a primary influence on future responding. The impact and interaction of other experiential histories within the family that affect children's emotional security are also examined, with a focus on parent-child relations.

There is increasing concern about the impact of marital conflict on children. Approximately 40% of children born in the late 1970s and early 1980s will experience a parental divorce (U.S. Bureau of the Census, 1985), which often involves significant interparental discord. Furthermore, marriages are most discordant during the child-rearing years (Belsky & Pensky, 1988; Cox, 1985; Glenn, 1990), particularly infancy and early childhood (Belsky & Rovine, 1990).

Links have long been reported between marital discord and children's psychological problems (Baruch & Wilcox, 1944; Gassner & Murray, 1969; Hubbard & Adams, 1936; Jouriles, Bourg, & Farris, 1991; Porter & O'Leary, 1980; Rutter, 1970; Towle, 1931; Wallace, 1935). Marital conflict is a better predictor of children's adjustment problems than global marital distress (Emery & O'Leary, 1984; Johnson & O'Leary, 1987; Porter & O'Leary, 1980), with relations remaining after the latter has been statistically controlled (Jenkins & Smith, 1991; Jouriles, Murphy, & O'Leary, 1989). Marital conflict also is more closely associated with children's problems than "encapsulated" distress between spouses (Hetherington, Cox, & Cox, 1982) or marital apathy (Jenkins & Smith, 1991).

A wide range of adjustment problems are predicted by marital conflict (see Grych & Fincham, 1990, for a review), especially externalizing (e.g., aggression and noncompliance; Holden & Ritchie, 1991; Jenkins & Smith, 1991; Jouriles, Barling, & O'Leary, 1987) disorders but also internalizing disorders (Holden & Ritchie, 1991; Johnston, Gonzalez, & Campbell, 1987; Jouriles et al., 1987) and other forms of maladjustment (Long, Forehand, Fauber, & Brody, 1987; Jouriles et al., 1989; Wiersma, Forehand, & McCombs, 1988). The witnessing of interparental conflict has been reported by elementary school

children to be the third most distressing life stressor (Lewis, Siegel, & Lewis, 1984).

Furthermore, marital conflict figures in the negative impact of various risk environments on children. For example, one of the most significant aspects of the family environment for children of divorce is the level of parental fighting. Marital conflict predicts behavior problems in children of divorce (Amato & Keith, 1991; Emery, 1988; Rutter, 1979). Also, children of parents who divorce exhibit heightened aggression, impulsivity, hyperactivity, anxiety, and emotional problems as many as 11 years before the divorce (Block, Block, & Gjerde, 1986), with elevated marital conflict before the divorce implicated in these relations.

As another example, among children of depressed parents, marital conflict better predicts some adjustment problems than parental depression (Keller et al., 1986; Rutter & Quinton, 1984), and such conflict is generally a predictor of children's functioning in these families (Emery, Weintraub, & Neale, 1982; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993). On the basis of their extensive review of the literature on children with depressed parents, Downey and Coyne (1990) concluded that "marital discord is a viable alternative explanation for the general adjustment difficulties of children with a depressed parent" (p. 68; see also Cummings & Davies, 1994b).

Thus, the significance of marital conflict to the development of children in families is well established, although relations are stronger in clinical than in nonclinical samples (Fincham & Osborne, 1993). However, the mechanisms through which marital conflict affects children are little understood and in some question (Emery, 1982).

Further advances require that research focus more on specific processes and process relations (Cummings & Cummings, 1988; Fincham & Osborne, 1993). For example, anger is frequently treated as if it were a single or unitary stimulus. In fact, distressed marriages vary widely in conflict expression, the meaning of conflict for the marriage and the family, and the end result of the conflict process (Cummings & Davies, 1994a). Also, if couples fight a great deal, does that necessarily mean that they are unhappy? Some couples have frequent dis-

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agreements and disputes but are comfortable with the process of open disagreement, and often things end on a positive note. The prediction of child outcomes may be improved substantially by greater specification of how conflict is expressed within families. Consistent with recent process-oriented themes in research, this review addresses literature detailing the effects of specific modes of conflict on children.

Relatedly, more complex, process-oriented directions call for new theoretical perspectives to organize existing studies and suggest directions for future research. The paucity of theory is a significant gap in the field. Although many important and interesting studies have been published in the past decade, few attempts have been made to make theoretical sense of this rapidly increasing knowledge base.

A notable exception is the cognitive-contextual model recently proposed by Grych and Fincham (1990). These authors offered a theoretical model for the impact of marital conflict as mediated by children's understanding and appraisals of conflict. A framework was presented and research reviewed on how children's cognitive processing and coping behaviors are shaped by the characteristics of marital conflict and contextual factors such as past experience with conflict, gender, expectations, and mood. Affect was acknowledged as relating to the evaluation of the significance of conflict and to the guiding of behavior after exposure to conflict. However, the emphasis was on the mediational role of cognition, with affect more secondary (see Grych & Fincham, 1990, Figure 1, p. 278).

Furthermore, questions remain in regard to what is unique about conflict as a source of distress and what unique processes it sets into motion. Thus, Grych and Fincham's (1990) model is relatively general with regard to what psychological concerns are paramount and are most crucially affected by marital conflict. In particular, it is not clear what explicit *child development* theory or perspective guides children's reactions, particularly in terms of emotionality. That is, the model could apply to adults or to children. However, marital discord has different implications for children than for parents, and the emotional concerns of childhood are distinctly different from those of adulthood.

Moreover, the literature demonstrates a central role of emotionality in children's coping with marital conflict. Numerous studies provide evidence of powerful emotional (Cummings, 1987) and even physiological (El-Sheikh, Cummings, & Goetsch, 1989) reactions by children to adults' conflicts and of relations between children's processes of emotional arousal and histories of marital conflict (J. S. Cummings, Pellegrini, Notarius, & Cummings, 1989). High levels of previous exposure to marital conflict leave children primed for higher, and even more negative, emotional responses in later conflict contexts (Cummings, Iannotti, & Zahn-Waxler, 1985; J. S. Cummings et al., 1989). Emotional functioning clearly is one key to understanding the ontogeny of the adjustment problems associated with marital conflict histories (Cummings & Davies, 1994a).

In this review, we present a model and review research with an emphasis on emotionality: its regulation in marital relations (e.g., intensity and resolution), how it is managed by the child, and the role of the quality of other emotional relations in the family (e.g., parent-child attachment). We propose that emotional security is a paramount factor in children's regulation of emotional arousal and organization and in their motivation to

respond in the face of marital conflict. We also contend that the internalized representations of parental relations and response processes that develop over time have implications for children's long-term adjustment. Emotional security is seen as a product of past experiences with marital conflict and as a primary influence on future responding. Thus, it plays a central role as an immediate mediator in situations in which children are exposed to parents' conflict, and it is also an internalized representation in a trait sense. Attachment theory is an important influence on our emotion theory; however, we propose that emotional security derived from experiences with parents' conflicts is distinct from processes of emotional security derived from parent-child interactions. For example, children may appraise parent-child attachments as secure but have an insecure representation of the parents' relationship.

In important respects, our model builds on and complements the excellent framework proposed by Grych and Fincham (1990). We acknowledge that cognition is important to coping processes (see Cummings & Cummings, 1988) and regard their model as contributing significantly to the articulation of cognitive processes. Like Grych and Fincham (1990), we stress contextual factors. However, we place greater emphasis on emotionality in the very emotion-laden domain of family conflict and, specifically, the significance of emotional security to children's reactions to family conflict.

We begin by examining how our emotional security hypothesis for the impact of marital conflict derives from developmental theory in the attachment tradition. Next, we further define the construct of emotional security in terms of several specific component processes that affect children's functioning. We then consider the usefulness of the construct for understanding (a) the immediate impact of contextual variants of marital conflict and (b) developmental pathways between marital discord and children's longer term adjustment. We also examine the impact and interaction of other experiential histories that affect the emotional security children derive from family functioning, focusing on parent-child relations. Finally, we outline directions for future research.

An Emotional Security Hypothesis

Children's response to marital conflict is not emotional contagion (i.e., it is not simply a direct function of the degree of anger and conflict in marital relations). Instead, their responses are governed by the implications of marital conflict for their emotional security. Children's emotional well-being in the face of marital conflict reflects the meaning of conflict for family relations, not just the fact of fighting or the fact that unpleasant emotions are expressed. A special component process is the degree of resolution of conflict, but other factors are also important. Brief bickering, for example, may go unresolved, but the child may nonetheless perceive no threat to family or marital functioning. Thus, this relatively minor form of conflict may have no negative impact on his or her emotional security.

Our hypothesis is that some forms of family conflict can contribute to children's sense of emotional security and that other forms are undermining. Implications for adjustment derive from emotional security supporting the child's ability to cope effectively and competently with daily problems. By contrast,

emotional insecurity, through a variety of processes (described later), promotes less effective coping and greater emotional and behavioral dysregulation in response to daily stresses and challenges.

Children's emotional security has long been seen as influenced by the quality of parent-child relations, specifically the quality of parent-child attachments. Attachment refers to the emotional bond that develops between the parent and child (Bowlby, 1969), and attachment security derives from children's experiences with parents (Ainsworth, Blehar, Waters, & Wall, 1978). Emotional warmth, responsiveness, and stability in parent-child relations foster the development of secure attachments.

Children with secure attachments are less prone to emotional distress, including intense or chronic fear (Bowlby, 1973). According to some formulations, securely attached children have greater "felt security" when faced with stressful family events (Cummings, 1990; Sroufe & Waters, 1977). Secure attachment facilitates children's regulation of negative emotional arousal (Cassidy, 1993; Kobak & Barbagli, 1993). Internal representations of others and the self that develop from secure attachments support adjustment (Bretherton, Ridgeway, & Cassidy, 1990).

Evidence for relations between attachment security and emotional functioning is impressive (Bretherton, 1985; see Greenberg, Cicchetti, & Cummings, 1990). Security of attachment predicts children's socialization (Bretherton, 1985)—including risk for adjustment problems (Erickson, Sroufe, & Egeland, 1985)—and their self-confidence and cognitive performance throughout childhood and adolescence (Jacobsen, Edelstein, & Hofmann, 1994).

We propose that children's emotional security also derives from the quality of the marital relationship. Children have sound bases for concern about the quality of marital relations. Marital conflict can cause family life to be emotionally unpleasant, threaten the child's emotional or even physical well-being, result in a breakdown of discipline practices, and reduce the emotional availability or sensitivity of parents (see Cummings & Davies, 1994a). Adults' conflicts are stress inducing, even for very young children (Cummings, Zahn-Waxler, & Radke-Yarrow, 1981). From an early age, children articulate strategies for mediating marital conflicts (Covell & Abramovitch, 1988; Covell & Miles, 1992). Marital conflict may have negative implications for the future intactness of the family, with children taking the blame for marital problems (Grych & Fincham, 1993). Family dissolution as an end result of destructive marital conflict drastically reduces the psychological availability of the non-custodial parent, also causing economic hardship and many difficult life changes.

A broader family view of the origins of children's emotional security is supported by recent formulations from an attachment theory perspective (Marvin & Stewart, 1990). Insecure attachment and family dysfunction are interrelated (Belsky, Rovine, & Fish, 1989; Greenberg & Speltz, 1988). Thus, Bretherton and colleagues (1990) found that insecure attachment was associated with a lack of family cohesion ($r = .53$) and with low levels of family adaptability ($r = .57$). Egeland and Farber (1984) reported that changes in family processes during the 2nd year of life were related to changes in attachment patterns. Increased family discord predicted more insecure attachments,

whereas reduced family discord resulted in more secure attachments.

We propose that children's concerns about emotional security play an organizing and directing function in their reactions to marital conflict. The role of emotional security in this regard is well articulated with regard to parent-child attachment (Sroufe & Waters, 1977) and, we suggest, can be extended to children's responses to marital conflict.

The primacy of emotionality can be observed in children's reactions to interadult conflict; the most salient reaction is emotional distress (e.g., Cummings, 1987). More than half of the children studied in a large representative American sample reported feeling afraid during marital arguments (Zill, in press). Furthermore, as the level of marital conflict increased, children's emotional distress and insecurity became greater (Zill, in press).

Emotional well-being and a capacity for emotional regulation in the face of stress are at the core of emotional security. Children who are emotionally secure about their parents' relationship have confidence in the stability and predictability of marital interactions, an expectation that marital conflicts will eventually ameliorate, and confidence in the continuing psychological and physical availability of parents. Also, they perceive that family disputes pose no significant threat to their physical and psychological well-being.

Bowlby (1973) defined emotional security in parent-child relations in terms of susceptibility to fear and the availability of attachment figures. Three elements were introduced:

The first is that, when an individual is confident that an attachment figure will be available to him whenever he desires it, that person will be much less prone to either intense or chronic fear than will an individual who for any reason has no such confidence. The second proposition . . . postulates that confidence in the availability of attachment figures, or lack of it, is built up slowly during the years of immaturity—infancy, childhood, and adolescence—and that whatever expectations are developed during those years tend to persist. . . . The third proposition concerns the role of experience. It postulates that the varied expectations of the accessibility and responsiveness of attachment figures that different individuals develop during the years of immaturity are tolerably accurate reflections of the experiences those individuals have actually had. (Bowlby, 1973, p. 202)

In extending this notion, we propose that children's exposure to marital interactions, parenting practices, and, to a lesser extent, other family experiences (e.g., relationships with siblings) also influence their sense of emotional security.

Children's coping with marital conflict can be viewed from a control systems perspective that emphasizes the role of emotionality (Bowlby, 1969). Thus, the "set goal" of children's behavioral system in response to marital conflict is felt security, with affect serving as a mediator of coping responses (Cummings, 1990; Sroufe & Waters, 1977). Consistent with Bowlby (1969), appraisal processes are conceptualized as having both emotional and cognitive elements. When conflicts are appraised as destructive and reflective of significant marital disharmony, children's negative emotional arousal becomes elevated, and they are motivated to act to decrease their feelings of emotional insecurity. Furthermore, past experiences with destructive marital conflict influence reactions to present conflicts. In particular, such histories increase children's negative emotional

arousal and negative cognitive expectancies. In this conceptualization, the more felt security is reduced by destructive marital conflict, the more strongly the behavioral system regarding the parents' relationship is activated toward the set goal of emotional security.

Consistent with a functionalist theory of emotion, emotions are posited as significant internal monitoring and guidance systems, with the functions of appraising events and motivating human behavior (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986; Campos, Campos, & Barrett, 1989). According to this perspective, emotions are organizers of interpersonal and personal experience; they are not reduced to cognitions. Thus, Sroufe (1979, p. 462) argued that "affective life is the meaning and motivational system that cognition serves." As Bretherton et al. (1986, p. 530) put it, "Cognitions and perceptions inform and modulate the emotion system; they are not synonymous with it." Emotionality may also influence cognitions. For example, intense marital conflict may strain children's emotional regulatory functioning such that information is misinterpreted and cognitive processing disrupted. In sum, emotional reactions and the cumulative effects of marital conflict on emotional functioning are primary processes of effect.

The Construct of Emotional Security: Component Processes

The immediate impact of adults' angry conflicts on children's emotionality is well documented. Exposure to adults' conflicts induces emotional distress in children, with effects evident in behavioral, affective, cognitive, and physiological responses (Ballard, Cummings, & Larkin, 1993; Cummings, 1987; El-Sheikh et al., 1989; Gottman & Katz, 1989; Grych & Fincham, 1993; O'Brien, Margolin, John, & Krueger, 1991). Emotional dysregulation and arousal (Cummings et al., 1981), dysregulation of interpersonal behavior and aggression (Cummings et al., 1985; Cummings, Hennessy, Rabideau, & Cicchetti, 1988; self-reports of guilt and anxiety (Covell & Abramovitch, 1988; Grych & Fincham, 1993), and triadic involvement in parents' disputes (Covell & Miles, 1992; J. S. Cummings et al., 1989; Vuchinich, Emery, & Cassidy, 1988) have all been reported.

To account for these effects, we propose that emotional security has an impact on children's functioning through several interrelated processes. First, emotional security affects children's regulation of their own emotions, including subjective feeling states, overt behavioral expressions of emotion, and physiological functioning (see Cummings & Davies, 1994a). Second, emotional security, serving a motivational function, guides children to cope with significant family events by motivating them to regulate or attempt to regulate their parents' behavior. Third, emotional security affects children's cognitive appraisals and internal representations of family relationships.

Emotional Security and Children's Regulation of Their Own Emotional Arousal

Repeated exposure to destructive marital conflict may induce chronic elevation of arousal and dysregulation of children's emotions and behaviors, fostering adjustment problems. Such experiential histories have repeatedly been linked with height-

ened emotional and behavioral reactivity in conflict situations, particularly in reaction to background anger between adults (Cummings & Zahn-Waxler, 1992).

Explanations center on one of three hypotheses. First, a variation of the adaptive-cost hypothesis (Glass & Singer, 1972) has been proposed (see Cummings & Cummings, 1988). Psychological energy and resources are required to generate and maintain an aroused, vigilant state. High, persistent levels of vigilance and arousal deplete psychological energy, competing for resources required for the child to modulate emotions and behaviors effectively. As resources are depleted, it becomes increasingly difficult to regulate emotions and behaviors, particularly in a stressful, challenging context of parental discord. Children's abilities to regulate emotions and social interactions affect functioning both within and outside the family (e.g., interpersonal relations with peers; see Dodge, 1991; Fabes & Eisenberg, 1992).

Second, the energizing effects of arousal may influence children's functioning. Interadult conflict elicits negative emotional and physiological arousal in children (Ballard et al., 1993; El-Sheikh et al., 1989; El-Sheikh & Cummings, 1992). According to Zillmann (1983), repeated exposure to an emotionally arousing event results in sensitization, whereby responses are intensified with more frequent exposure to the stimulus. The contention is that even quite different emotional states (e.g., happiness and sadness) affect negative responding to stressful conditions in similar, nonspecific ways, with the generalized level of arousal the key dimension.

The third view distinguishes the effects of positive and negative emotions, with the induction of negative emotions seen as central to the negative impact of exposure to interparental conflicts. Thus, Grych and Fincham (1990) hypothesized that negative emotions predispose children to attend to and remember negative characteristics of marital conflict, increasing the likelihood of negative reactions. Positive affect, on the other hand, reduces the stressfulness of conflict for children.

Davies and Cummings (1994) recently provided experimental evidence that felt emotions cause, rather than simply correlate with, children's reactions to interadult anger. Children between 4 and 8 years of age were induced to feel angry, sad, neutral, or happy just before exposure to interadult anger. Relative to children in a neutral condition, children in the negative emotional arousal (either sadness or anger) condition evidenced increased behavioral distress, reduced perceptions of self-regulation, and increased negative appraisals. By contrast, positive affect elevated children's optimistic expectancies for the future interactions of the angry couple.

Children's Attempts to Regulate Marital Emotions

Children may work to increase their sense of emotional security through behaviors that regulate, reduce, or terminate their parents' conflicts. Although such responses may be adaptive in the short term because they reduce distress, aggressive or disruptive behavior patterns may be fostered in children over the long term. For example, children may interrupt interparental conflicts by misbehaving (e.g., becoming aggressive or crying), thereby successfully distracting the parents from their argument and focusing their attention on a less serious, discipline prob-

lem. However, the negative reinforcement of aggressive and other disruptive behaviors increases the chances that these behaviors will be exhibited in subsequent aversive situations (see Emery, 1989; Patterson, 1982). If marital conflict is frequent and the reinforcing process is consequently repeated over and over again, increasingly strong, persistent aversive behavioral patterns may develop in children.

Children from discordant families have more incentive for taking action in marital disputes than do children from harmonious homes (Emery, 1989). In such families, interparental conflicts continue for longer periods, more often become progressively worse and escalate, and may become physically abusive or even proliferate to include children as targets of hostility (Jouriles et al., 1989; Wolfe, 1987). Thus, the threat to emotional security is greater, giving children more motivation to intervene (in line with the argument that emotions motivate behavior; Campos et al., 1989; Dodge, 1989).

In fact, children of discordant marriages are more likely to take action in response to parental disputes, consistent with the view that emotional insecurity and children's efforts to regulate marital emotions are related. Thus, one study reported that, in comparison with other boys, boys from homes with interparental aggression advocated more verbal and physical intervention in interparental conflicts (O'Brien et al., 1991). Another study found that 1-2-year-olds exposed to more interparental fighting more often comforted or distracted parents during conflicts taking place in the home (Cummings et al., 1981). Even when the expression of anger by adults is controlled under laboratory circumstances, children from homes high in discord more often comfort or defend their mother (J. S. Cummings et al., 1989).

Emotional Security and Internal Representations

Attachments are conceptualized to influence children's internal representations or working models of themselves and their social world (Bretherton, 1985). Similarly, children's experiential histories with marital conflict may result in internalized representations or working models with important implications for their adjustment over time.

According to the cognitive-contextual model, children's internal representations based on past experiences play an important role in their adjustment to conflict, including their primary assessment of the negativity, threat, and self-relevance of conflict and their secondary appraisal of why the conflict is occurring, who is responsible, and whether they have adequate skills for coping (Grych & Fincham, 1990). These cognitive processes can be seen as driven by children's underlying concerns about emotional security. For example, a child who is emotionally insecure about marital interactions as a result of past exposures to intense marital conflicts may more readily perceive threat, whereas a child who is secure about his or her parents' relationship may require considerably more provocation to experience threat.

What children learn about regulating emotions from observing marital interactions may affect their own emotional functioning. Adjustment problems may arise from children modeling parents' agonistic behaviors (Emery, 1982; Schwarz, 1979; Tschann, Johnston, Kline & Wallerstein, 1989) through the acquisition of rules (Bandura, 1973, 1986) or affect scripts for per-

forming behavior (Tomkins, 1979). Repeated experiences may cause children to construct event schemata that they use to guide decisions, make inferences, and predict future outcomes (Bretherton, 1985). When these scripts or models of experienced events are called up, affective as well as cognitive components are represented. Thus, children's reactions may reflect not only the immediate context of interparental conflict but affective and cognitive representations resulting from past exposures. Such processes may contribute to the sensitization to conflict that has been reported in children with histories of exposure to destructive conflict (e.g., J. S. Cummings et al., 1989).

On the other hand, children may learn constructive lessons from exposure to resolved conflicts. For example, children's observation of parents' effective conflict resolution may teach them valuable skills for resolving their own differences with peers or siblings (see Cummings & Davies, 1994a). Children thus learn that conflict between parents is not inherently destructive and is, in fact, a necessary element in finding solutions to family problems and promoting family functioning.

Certain internal representations and feelings of emotional insecurity are interrelated (Cummings & Cicchetti, 1990). Shame and responsibility (Grych & Fincham, 1993; Grych, Seid, & Fincham, 1992), as well as fear of being "caught" in the conflict (Johnston et al., 1987), may result from exposure to destructive conflict processes. Buchanan, Maccoby, and Dornbusch (1991) found that fears of being caught in conflict, in turn, were related to poor adjustment. Children's sense of predictability and control, which is closely tied to emotional security in some accounts (Bowlby, 1973), has been linked to coping processes and the incidence of behavior problems (El-Sheikh & Cummings, 1992; Rossman & Rosenberg, 1992).

Impact of Exposure to Marital Conflict on Children

Marital conflict, without regard to correlated family effects (e.g., effects on parenting practices and quality of attachments), has an impact on children's emotional arousal and regulation of emotion and behavior. However, such effects are highly dependent on the forms of expression of marital conflict (e.g., content and resolution) and context (e.g., past experiences with conflict, temperament, and gender; Grych & Fincham, 1990).

Emotional Security and Contexts of Marital Discord

A goal for an emotional security hypothesis is to specify the conflict expressions that undermine children's emotional security and those that ameliorate the impact of marital conflict. Some expressions of marital conflict may even foster emotional security by teaching children valuable lessons about how to handle negative feelings and the inevitable conflicts of life.

Anger and conflict are complex and multidimensional. An understanding of their impact requires differentiation of anger and conflict as stimuli. Consistent with an emotional security hypothesis, forms of conflict expression reflecting intense marital difficulties and involving direct threat to the child have been found to be the most disturbing to children. On the other hand, the resolution of conflict, suggesting stability and reduced threat, substantially reduces children's emotional distress.

Table 1
Frequency of Marital Conflict and Child Adjustment

Study	Sample	Method	Results
Cummings, Iannotti, & Zahn-Waxler (1985)	110 2-year-old children (58 boys, 52 girls)	Laboratory observations of children	Children exposed to 2 angry adult conflicts responded with significantly higher levels of distress and aggression than a separate sample of children exposed to a single conflict
Cummings, Zahn-Waxler, & Radke-Yarrow (1981)	24 12- to 30-month-old children (11 boys, 13 girls)	Mothers trained to reliably observe home conflicts	The number of reported marital conflicts was associated with increased tendencies for children to respond with anger ($r = .38$), distress ($r = .40$), involvement in parental conflict ($r = .55$), and multiple emotional reactions ($r = .68$)
Emery & O'Leary (1984)	132 2nd- to 5th-grade children (71 girls, 61 boys)	Questionnaires completed by parents and teachers	Parental ratings on the OPS were correlated with teacher ratings of school competence on the BPC ($r = -.17$)
Hershorn & Rosenbaum (1985)	45 boys (mean age = 9.1 years)	Questionnaires completed by parents	Children exposed to frequent marital conflict, as measured by parental OPS ratings, were more likely to exhibit conduct and personality problems on the basis of parental BPC ratings
Johnston, Gonzalez, & Campbell (1987)	56 4- to 12-year-old children (28 boys, 28 girls)	Questionnaires completed by parents	Frequency of marital conflict (based on combined reports of CTS-V and CTS-P) during divorce mediation did not predict concurrent parental ratings of child problems on the CBCL but did predict CBCL ratings of depression, withdrawal, aggression, and somatic complaints 2 years later
Jouriles, Piffner, & O'Leary (1988)	60 18- to 30-month-old children (30 boys, 30 girls)	Questionnaires completed by parents	Parental report on a modified version of OPS was correlated with parental ratings of child behavior problems for boys ($r = .32$) but not girls.
Long, Forehand, Fauber, & Brody (1987)	40 11- to 13-year-old children (20 boys, 20 girls)	Questionnaires completed by parents and teachers and observations of mother-child interactions	High parental OPS ratings predicted teacher reports of (a) low cognitive competence, (b) low social competence, and (c) behavior problems and observations of poor problem solving during a mother-child conflict-resolution task
Wierson, Forehand, & McCombs (1988)	178 10- to 15-year-old children	Questionnaires completed by parents and teachers	Parental OPS ratings were correlated with teacher reports on social-cognitive competence measures and the RBPC 1 year later

Note. OPS = O'Leary-Porter Scale (Porter & O'Leary, 1980); BPC = Behavior Problem Checklist (Quay, 1977); CTS-V = Conflict Tactics Scale—Verbal Subscale (Straus, 1979); CTS-P = Conflict Tactics Scale—Physical Subscale (Straus, 1979); CBCL = Child Behavior Checklist (Achenbach & Edelbrock, 1983); RBPC = Revised Behavior Problem Checklist (Quay & Peterson, 1987).

Frequency. The frequency of interparental conflict has been linked to children's adjustment problems (Rutter, 1971). All eight studies shown in Table 1, using a variety of different methodologies, support this conclusion.

However, results are primarily based on correlations, which are subject to alternative interpretations. For example, a third factor could account for both more frequent conflict and negative outcomes. On the other hand, observationally based studies also support links between frequency and children's difficulties. For example, on the basis of mothers' diaries of family conflicts, Cummings et al. (1981) reported that more frequent interparental conflicts were associated with heightened levels of distress, insecurity, and anger. Using an experimental methodology, Cummings et al. (1985) found that a second exposure to *interadult conflict increased children's distress and aggression.*

Thus, the evidence suggests that children become more emotionally insecure with increased exposure to conflict.

However, effects attributed to frequency may reflect, in part, associations between frequency and destructive conflict expression. These dimensions are likely to covary; that is, those who fight more are likely to be more hostile each time they fight. The laboratory evidence (Cummings et al., 1985) is based on repeatedly exposing children to unresolved conflict. In fact, repeated exposure to resolved conflicts may have very different effects (see later discussion). Thus, the way in which conflict is expressed may be important to the impact of the frequency of conflict on children's emotional security.

Form. Violence is a particularly negative form of conflict expression from the children's perspective. Eleven of the 12 studies listed in Table 2 found that, among the various forms of

Table 2
Form of Marital Conflict and Child Adjustment

Study	Sample	Method	Results
Cummings, Vogel, Cummings, & El-Sheikh (1989)	63 4- to 9-year-old children (34 boys, 29 girls)	Children's self-reported responses to videotaped vignettes of adult conflicts; questionnaires completed by parents	Children perceived vignettes of physical conflicts as being significantly more negative than nonverbal and verbal conflicts. Children responded in comparable, negative ways to verbal and nonverbal conflict. Children from maritally violent homes (based on parental CTS-P) were significantly more likely to report feeling distressed when watching videotapes of conflict. However, parental CTS-P ratings were not related to parent reports on the CBCL
Cummings, Zahn-Waxler, Radke-Yarrow (1981)	24 12- to 30-month-old children (11 boys, 13 girls)	Mothers trained to reliably observe home conflicts	Maternal observations indicated that children responded with significantly more distress to marital conflicts involving physical violence as opposed to verbal anger
J. S. Cummings, Pellegrini, Notarius, & Cummings (1989)	48 2- to 5-year-old children (24 boys, 24 girls)	Questionnaires completed by parents; trained observers' ratings of children's responses to a conflict involving their mothers	Children from maritally violent homes (parental CTS-P ratings) were observed to exhibit greater concern, preoccupation, and involvement when an adult angrily confronted their mother in the laboratory
Fantuzzo et al. (1991)	107 3- to 6-year-old children (58 boys, 49 girls)	Questionnaires completed by mothers; self-report measures for children	Exposure to high levels of verbal parental conflict (maternal CTS ratings) predicted moderate levels of child conduct problems on parent-completed CBCL; exposure to verbal and physical conflict between parents predicted severe child conduct problems and high levels of child emotional problems on the CBCL, as well as lower levels of perceived maternal acceptance by the children
Hershorn & Rosenbaum (1985)	45 boys (mean age = 9.1 years)	Questionnaires completed by parents	Comparisons of CBCL ratings of mothers in violent marriages versus mothers in nonviolent, discordant marriages were not significant
Holden & Ritchie (1991)	74 2- to 8-year-old children (35 boys, 39 girls)	Questionnaires completed by parents; observations of parent-child interactions	Children of battered wives, relative to a comparison group of children, were more likely to exhibit internalizing problems, difficult temperaments, and aggression toward their mother according to maternal report and were also more likely to become involved in conflicts with their mother according to objective observational measures
Jenkins & Smith (1991)	119 9- to 12-year-old children	Retrospective interviews with parents and children concerning marital conflict and family functioning	Although parental reports of nonverbal conflict were significantly correlated with parent and child reports of child behavior problems, these relations were not significant after parental reports of child-rearing disagreements and overt marital conflicts had been controlled. Significant correlations were found between parental reports of overt marital conflict and parent and child perceptions of child behavior problems

(table continues)

Table 2 (continued)

Study	Sample	Method	Results
Jouriles, Murphy, & O'Leary (1989)	87 5- to 12-year-old children (41 boys, 46 girls)	Questionnaires completed by parents	Parents' ratings on the CTS-P predicted parental reports of child conduct problems, personality problems, and immaturity on the BPC after marital discord scores on the SMAT had been statistically controlled
O'Brien, Margolin, John, & Krueger (1991)	35 8- to 11-year-old boys	Questionnaires completed by mothers and sons; sons' self-reported responses to simulations of conflicts between parents	In comparison with boys exposed to high-conflict, nonviolent marriages, boys from maritally violent homes had more problems dealing directly with the conflicts and reported higher levels of arousal and involvement in response to audiotaped conflicts
Rossmann & Rosenberg (1992)	94 6- to 12-year-old children (41 boys, 53 girls)	Questionnaires completed by parents and children	Parental ratings on the CBCL revealed that children from maritally violent homes exhibited significantly higher levels of somatic complaints, externalizing problems, and social maladjustment. Children from maritally violent homes also reported feeling less competent than children in the other groups
Wolfe, Zak, Wilson, & Jaffe (1986)	63 4- to 13-year-old children (17 recent spouse abuse witnesses, 23 past spouse abuse witnesses; 23 nonviolent homes)	Questionnaires completed by mothers	Children recently exposed to spousal violence exhibited lower levels of social competence than children from past abusive homes and nonviolent homes, according to CBCL ratings. No group differences were found for internalizing or externalizing problems

Note. CTS-P = Conflict Tactics Scale—Physical Subscale (Straus, 1979); CBCL = Child Behavior Checklist (Achenbach & Edelbrock, 1983); BPC = Behavior Problem Checklist (Quay, 1977); SMAT = The Short Marital Adjustment Test (Locke & Wallace, 1959).

conflict, physical aggression carried the greatest risk for children in terms of negative reactions and adjustment problems.

Home observations indicate that physical conflicts between parents elicit more distress than does verbal anger (Cummings et al., 1981). Furthermore, when exposed to videotapes of interadult conflicts involving physical aggression, children perceive these scenarios as more angry than either verbal or nonverbal expressions of conflict and also report more negative emotional responses than to the other conflict types (Cummings, Ballard, & El-Sheikh, 1991; Cummings, Vogel, Cummings, & El-Sheikh, 1989).

Histories of interparental aggression are associated with a wide range of behavioral and emotional problems in children (Emery, 1989), as well as social skill impairments (Wolfe, Jaffe, Wilson, & Zak, 1985). Severe psychopathology is approximately four times more likely in children of battered women than among children from nonviolent homes (Holden & Ritchie, 1991; Wolfe et al., 1985). The risk for psychological problems remains even after general marital discord has been statistically controlled (Jouriles et al., 1989). One recent study found that verbal and physical forms of conflict between parents were linked with high rates of both internalizing and externalizing problems in children, whereas verbal conflict was associated only with low to moderate levels of externalizing problems (Fantuzzo et al., 1991).

Notably, parental aggression toward children and interspou-

sal aggression are highly related (Gelles, 1987; Hughes, 1988; Jouriles et al., 1987). Because there is both a physical and a psychological threat, the impact on children's feelings of security is likely to be particularly negative.

Comparisons of children's responses to verbal and nonverbal conflict have yielded an equivocal pattern of results. On the basis of retrospective interviews with parents and children, Jenkins and Smith (1991) reported that nonverbal conflict was not associated with children's adjustment problems. However, experimental evidence indicates that children respond negatively to adults' nonverbal disputes (e.g., nonverbal looks and gestures, as in the "silent treatment"), with effects comparable to reactions to verbal conflicts (e.g., Cummings, Ballard, & El-Sheikh, 1991; Cummings et al., 1989).

One possibility is that retrospective methodologies are relatively insensitive to nonverbal conflict; thus, relations with child outcomes may be attenuated. Alternatively, nonverbal anger may stress children but have no lasting effects. More research on this question is needed.

Content. Disputes over child-related issues are particularly stressful for children. Four of the five studies listed in Table 3 support this conclusion. Marital conflict over child rearing is a better predictor of child behavior problems than either global marital distress or conflicts in areas not related to child rearing (Jouriles, Murphy, et al., 1991; Snyder, Klein, Gdowski, Faulstich, & LaCombe, 1988).

Table 3
Content of Marital Conflict and Child Adjustment

Study	Sample	Method	Results
Grych & Fincham (1993), Study 1	45 11- to 12-year-old children (26 boys, 19 girls)	Children's self-reported responses to audiotaped vignettes of adult conflicts	Children responded to child-related conflicts with adults, in comparison with non-child-related conflicts, with greater shame, self-blame, fear that they would be drawn into the conflict, and intervention in the conflict
Jenkins & Smith (1991)	119 9- to 12-year-old children	Retrospective interviews with children and parents concerning marital conflict and family functioning	Mothers' and fathers' reports of the frequency of marital disagreements over child-rearing issues were significantly correlated with their ratings of overall child behavior problems; however, parental reports of the frequency of marital disagreements over child-rearing issues were unrelated to children's reports of their own behavior problems. Parents' reports of child-rearing disagreements were unrelated to their reports of child behavior problems after levels of overt and covert marital conflict had been statistically controlled
Johnston, Gonzalez, & Campbell (1987)	56 4- to 12-year-old children during marital separation (28 boys, 28 girls)	Parent report; clinician ratings	Clinician ratings of parents' involvement of the child in parental conflicts over child custody predicted parent reports of child withdrawal and aggression 2 years later after general marital conflict had been controlled
Jouriles, Murphy, et al. (1991), Study 2	87 4- to 6-year-old boys	Questionnaires completed by parents	Maternal reports of marital conflicts over child rearing were correlated with maternal CBCL ratings of internalizing problems ($r = .39$) after maternal OPS ratings had been controlled. Similar analyses revealed nonsignificant relations between child-rearing conflicts and child externalizing problems. Maternal OPS ratings were not associated with maternal CBCL ratings after child-related marital conflict had been controlled
Snyder, Klein, Gdowski, Faulstich, & LaCombe (1988)	110 3- to 17-year-old children (57 boys, 53 girls)	Questionnaires completed by parents	Parental reports of marital conflict over child rearing were significantly correlated with parental ratings of child adjustment ($r = .29$), depression ($r = .37$), delinquency ($r = .28$), anxiety ($r = .31$), withdrawal ($r = .26$), and social skill impairments ($r = .38$). Parental reports of overall marital discord and conflict about finances were unrelated to parental ratings on all dimensions of child functioning

Note. CBCL = Child Behavior Checklist (Achenbach & Edelbrock, 1983); OPS = O'Leary-Porter Scale (Porter & O'Leary, 1980).

Unlike other dimensions of conflict that are specifically linked to a risk for externalizing problems, fights over child rearing are also associated with internalizing symptomatology in outcome research (Johnston et al., 1987; Jouriles, Murphy, et al., 1991; Snyder et al., 1988). In an analogue study, Grych and Fincham (1993) reported relations between "internalizing" social cognitions and child-related conflicts. Specifically, in relation to non-child-related conflicts, conflicts about children elicited greater shame, responsibility, self-blame, and fear of being drawn into the conflict, feelings implicated in depressive and anxiety disorders associated with marital conflict (Buchanan et al., 1991). Thus, children's emotional insecurity, as reflected by fears and anxieties, is increased when conflicts concern them.

Resolution. The way in which conflicts end influences children's reactions. From the perspective of an emotional security hypothesis, conflict resolution, in particular, would be expected to foster emotional security. The resolution of conflict has a number of positive implications from the child's perspective (e.g., the emotional unpleasantness has abated, the possibility of conflict escalating to family violence is markedly reduced, the child need not become involved, the parents are more emotionally available, and the dispute probably does not have long-term negative implications for the intactness of the family).

The 11 studies listed in Table 4 consistently support the conclusion that resolution reduces children's negative reactions to interadult conflict. For example, Cummings et al. (1985) reported that 2-year-olds' aggression and distress were reduced to baseline levels after exposure to conflict resolution. Cummings et al. (1989) found that elementary school-aged children's anger and distress were significantly reduced when interadult conflicts were resolved. Several studies have reported that resolved conflicts elicit responses indistinguishable from responses to entirely friendly interactions (Cummings, Ballard, El-Sheikh, & Lake, 1991; Cummings, Simpson, & Wilson, 1993; Cummings et al., 1989).

Resolution is not dichotomous; rather, it varies along a continuum from no resolution to complete resolution. Children have been found to be sensitive to relatively subtle variations in resolution, with the negativity of responding corresponding to the degree to which fights are unresolved (Cummings, Ballard, El-Sheikh, & Lake, 1991).

The resolution of conflict often may not be directly observable by children. Can children still benefit? Cummings and colleagues (1993) examined the effects of several everyday contexts that indirectly communicated conflict resolution. Children's reactions to angry adults leaving a room and then interacting in a positive manner on their return (resolution "behind closed doors") and to a

Table 4
Conflict Resolution and Child Adjustment

Study	Sample	Method	Results
Cummings, Ballard, El-Sheikh, & Lake (1991)	98 5- to 19-year-old children (48 boys, 50 girls)	Children's self-reported responses to videotaped vignettes of adult conflicts	Videotapes of unresolved adult conflict elicited more angry responses in children than did partially resolved conflict, and partially resolved conflict elicited more anger in children than did fully resolved conflict. Children did not significantly differ in their angry responses to friendly interactions and fully resolved adult conflicts
Cummings, Hennessy, Rabideau, & Cicchetti (1994)	24 boys (mean age = 5 yrs, 12 physically abused 12 matched controls)	Laboratory observations of child behavior	Children exhibited less distress and coping behaviors after an adult argument to which they were exposed was resolved. Abused children also exhibited significantly lower levels of aggression after the adult conflict was resolved
Cummings, Iannotti, & Zahn-Waxler (1985)	110 2-year-old-children (58 boys, 52 girls)	Laboratory observations of children	Children's heightened aggression and distress in response to witnessing an adult conflict were reduced to baseline levels after the adults fully resolved their conflict
Cummings, Simpson, & Wilson (1993), Study 1	40 5- to 10-year-old children (20 boys, 20 girls)	Children's self-reported responses to videotaped vignettes of adult conflicts	In comparison with unresolved conflict, resolved conflict was perceived as less angry, and children reported feeling less negative emotional arousal
Cummings et al. (1993), Study 2	48 5- to 10-year-old children (24 boys, 24 girls)	Children's self-reported responses to videotaped vignettes of adult conflicts	Children responded more negatively to unresolved adult conflicts than to various forms of resolved adult conflicts. Children's emotional responses to resolved conflicts were comparable to their responses to friendly interactions
Cummings & Smith (1993)	40 2- to 7-year-old children; (20 girls, 20 boys)	Laboratory observations of sibling and peer behavior	Children's heightened distress in regard to an adult conflict significantly decreased when the conflict was subsequently resolved
Cummings, Vogel, Cummings, & El-Sheikh (1989)	63 4- to 9-year-old children (34 boys, 29 girls)	Children's self-reported responses to videotaped vignettes of adult conflicts	Children responded more negatively to unresolved adult conflicts than to resolved conflicts
J. S. Cummings, Pellegrini, Notarius, & Cummings (1989)	48 2- to 5-year-old children (24 boys, 24 girls)	Laboratory observations of child behavior	Children's heightened preoccupation and intervention responses during a simulated adult conflict were significantly reduced after resolution of the conflict
Davies & Cummings (1994)	64 4- to 8-year-old children (32 girls, 32 boys)	Laboratory observations of child behavior; child interviews	Children exhibited lower levels of behavioral distress, self-reported negative affect, and angry appraisals of adults after resolution of an adult conflict
El-Sheikh, Cummings, & Goetsch (1989)	34 4- to 5-year-old children (17 boys, 17 girls)	Laboratory observations of child behavior	Children's heightened distress and preoccupation during exposure to adult conflicts were significantly reduced after witnessing the adults resolve the conflict
Hennessy, Rabideau, Cicchetti, & Cummings (1994)	88 6- to 11-year-old children (52 boys, 36 girls; 44 low-SES physically abused, 44 low-SES controls)	Children's self-reported responses to videotaped vignettes of adult conflict	Children appraised unresolved conflicts, in comparison with resolved conflicts, as more negative, and they reported feeling more angry and sad

Note. SES = socioeconomic status.

verbal explanation by an adult of an unobserved resolution (explained resolution) were found to elicit reactions that were indistinguishable from responses to resolutions that were observed. Responses to all of these contexts for communicating resolution were far less negative than were responses to unresolved conflicts. In sum, children could perceive that conflicts have been resolved through a variety of channels of information.

Does the cumulative impact of an experiential history of exposure to interadult conflicts vary as a function of whether

conflicts are consistently resolved versus unresolved? Several recent laboratory studies indicate that children react less negatively to fights by a couple who have consistently resolved their conflicts in the past versus a couple who historically have not resolved their conflicts (El-Sheikh & Cummings, 1994, in press). A next step is to examine the effects of resolution history in the home; such an examination awaits the development of instruments sensitive to this dimension of marital conflict.

Thus, negative reactions are dramatically ameliorated by the

resolution of conflict, and, furthermore, children are highly sensitive to any suggestion of resolution. These results are consistent with the predictions of an emotional security hypothesis: Children react not just to the fact of conflict but to the interpersonal implications and meaning of conflict.

Finally, the constructiveness of conflict itself, not simply conflict endings, may affect children's reactions. Easterbrooks, Cummings, and Emde (1994) recently examined the responses of 1-3-year-olds to constructive discussions of marital disagreements, as defined by high rates of positive (smiles and laughter) and low rates of negative (disapproving looks and critical comments) marital behaviors. Positive or neutral responses (smiling, laughter, and independent play) by children were common, whereas anger, distress, and mediation were very infrequent. Thus, there was little evidence that emotional insecurity was induced by this context for marital dispute.

Summary. Research on the impact of the component processes of conflict provides important support for an emotional security hypothesis. Children respond not simply to whether or not conflict is expressed but to the implications of conflict for marital relations and, ultimately, themselves. Children react to resolved conflicts or disagreements expressed in an emotionally positive manner as if they are emotionally secure with these interactions. On the other hand, children respond to unresolved conflicts as if these behaviors induce feelings of emotional insecurity, particularly when they are characterized by physical aggression or child-related themes.

Why do resolved conflicts create less distress for children? Why does unresolved conflict elicit maladaptive reactions? Why are certain forms of conflict more distressing to children? As we have shown, an emotional security hypothesis provides a useful heuristic, reflecting trends in the literature, and a theoretical stand that is an impetus for future research.

Finally, much of the work on the component processes of conflict has been conducted in the laboratory of E. Mark Cummings and colleagues. Although not in and of itself problematic, this is a limitation that must be acknowledged. We encourage other laboratories to become active in this area.

Pathways of Effect: Relations Between Marital Conflict and Adjustment

An emotional security hypothesis proposes the following pathway of effect. First, emotional insecurity derives from children's experiential history with destructive marital conflict. Second, emotional insecurity promotes adjustment problems. Supportive of the psychological significance of negative emotional arousal in response to conflict, which is a central indicator of emotional insecurity, these reactions show stability over time (Cummings, 1987; Cummings, Hollenbeck, Iannotti, Radke-Yarrow, & Zahn-Waxler, 1986; Cummings et al., 1981; Cummings, Zahn-Waxler, & Radke-Yarrow, 1984) and organize multiple emotional, cognitive, and physiological elements of response (Cummings, 1987; Cummings & El-Sheikh, 1991; El-Sheikh et al., 1989).

Experiential histories of marital conflict and children's emotional security. Experiential histories of marital conflict predict children's emotionality when faced with interadult conflict. A history of interparental physical aggression is linked to

greater distress (Cummings et al., 1989; J. S. Cummings et al., 1989) and intervention in parental disputes (Barnett, Pittman, Ragan, & Salus, 1980; Christopoulos et al., 1987; J. S. Cummings et al., 1989; O'Brien et al., 1991). On the other hand, the incidence of parents' verbal conflicts, without regard to content, intensity, or resolution, has failed to predict children's reactions in several studies (Cummings et al., 1989; J. S. Cummings et al., 1989), which suggests the importance of indexes pertinent to the destructiveness of conflict.

Physical aggression in parent-child relations may also affect children's feelings of security in response to interadult conflict. Hennessy, Rabideau, Cicchetti, and Cummings (1994) found that physically abused boys reported greater fear than nonabused boys when faced with standardized presentations of interadult conflict and that they were more sensitive to whether or not a resolution had occurred. In terms of the reduction of feelings of fear, physically abused boys benefited even more than did nonabused boys from the resolution of adults' conflicts. In another study, physically abused boys became more aggressive and helped their mother more in response to a simulated conflict involving the mother than did a matched sample of nonabused boys of low socioeconomic status (Cummings et al., 1994). The fact that interadult physical aggression and physical child abuse are interrelated might be a factor underlying these associations; that is, interparental aggression may be perceived as a reliable harbinger of parent-child aggression among physically abused children.

Experiential history and sensitization. Common sense suggests that children exposed to a great deal of marital conflict will "get used to it" (i.e., habituate; Jeffrey & Cohen, 1971). This is, in fact, the opposite of what has been found, at least at the level of emotional and behavioral responding. Greater experiential history predicts more negative emotions (e.g., distress and anger) and greater behavioral reactivity (aggression and mediation) in children's responses to conflict (Ballard et al., 1993; Cummings et al., 1981, 1984, 1989; J. S. Cummings et al., 1989; El-Sheikh, in press; O'Brien et al., 1991).

Why are children not desensitized? We suggest that repeated exposure increases children's feelings of emotional insecurity; thus, their capacity for regulating emotions and behavior is reduced, leaving them more prone to feelings of fear, distress, and anger. An emotional security hypothesis thus can account for this seemingly counterintuitive finding in the literature.

An important qualification is that contextual factors are likely to be significant. Frequency of conflict may not necessarily be linked to sensitization, depending on how conflicts are expressed (e.g., see El-Sheikh & Cummings, in press). For example, because resolved or constructive conflicts do not engender emotionally insecure reactions (e.g., distress and anger) in the short term, it follows that such exposures are not likely to negatively affect children's sense of security.

But what of the notion that people habituate to events that they observe repeatedly? This may be true at an information-processing level of responding. Children exposed to an excessive amount of marital conflict may find its expression less novel and interesting than do other children (El-Sheikh, in press). However, at an emotional-conditioning level, sensitization describes reactions to destructive conflicts (e.g., interparental aggression),

with negative implications for children's feelings of emotional security.

Emotional security and adjustment. The model proposed also requires that increased emotional insecurity (distress, anger, and behavioral reactivity) predicts adjustment problems. Is greater emotional and behavioral reactivity linked to adjustment problems (e.g., aggression)? Are such responses associated with family environments of risk for adjustment difficulties?

Greater emotional and behavioral reactivity in response to interadult anger have been linked to aggression in children. For example, in one study, children with behavior problems evidenced more emotional arousal than other children (Cummings et al., 1989). Specifically, children classified as "in the clinical range" (at or above the 90th percentile) on the Child Behavior Checklist (Achenbach & Edelbrock, 1983) reported greater distress than other children in response to videotaped presentations of various forms of interadult anger. Cummings et al. (1985) reported that behavioral reactivity, in the form of aggressiveness between toddler-aged peers, increased the most after exposure to simulated conflicts among children independently classified as aggressive by observers in other settings. In another study, school-aged boys classified by their teachers as aggressive in relation to other boys were the most highly aroused by exposure to simulated conflicts, with the scoring of arousal based on children's self-reports of distress, behavioral impulses, felt emotions, and emotionality in response to anger (Klaczynski & Cummings, 1989).

Samples of children at risk for adjustment problems evidence greater difficulty with regulating emotions, behaviors, and even physiological arousal in response to conflict. For example, Zahn-Waxler, Cummings, McKnew, and Radke-Yarrow (1984) reported greater affective dysregulation in response to interadult conflict among toddlers of bipolar depressed parents than among toddlers of nondepressed parents. A more recent study reported that dysregulated aggression among 2-year-old children of depressed parents in a context involving exposure to adults' conflict predicted children's reports of difficulties during a structured psychiatric interview at 6 years of age (Zahn-Waxler, Iannotti, Cummings, & Denham, 1990).

A study of children of alcoholic parents (Ballard & Cummings, 1990) found that these children intervened more in the disputes of angry adult actors than did children of nonalcoholic parents. Marital conflict was greater in alcoholic homes than in nonalcoholic homes, but relations held even when family history of conflict was covaried out of the analyses. Specifically, children of alcoholic parents proposed more indirect involvements to make the adults feel better (e.g., cleaning the house and bringing the adults a drink); they were not more likely to suggest direct intervention strategies. Are these children sensitized to the need to solve adults' problems but wary of direct involvements in situations that, in alcoholic homes, might well get out of control? Such a pattern makes sense in terms of the dynamics of the alcoholic family system (West & Prinz, 1987). This raises the question of whether the form of expression of emotional insecurity by children is affected by the larger context of marital discord.

However, little attention has been paid to the strain that children, especially problematic children, put on a marriage and the potential for difficult children to foster marital conflict. For

example, the emotional stress of a newborn on marriages is well documented (Belsky & Rovine, 1990; Belsky, Spanier, & Rovine, 1983; Isabella & Belsky, 1985). Also, does increased negativity resulting from exposure to marital conflict contribute to aggressiveness in children, are aggressive children more prone to react with negative arousal and behavior, or both (Dodge, 1986)? These questions, most effectively studied in the context of a longitudinal design, remain for future research.

Children's Age, Sex, and Temperament

Age. From at least 6 months of age (Shred, McDonnell, Church, & Rowan, 1991) through late adolescence, children respond to unresolved anger between adults with visible upset (Cummings et al., 1981) or with reports of distress or anger (Cummings, Ballard, & El-Sheikh, 1991; Cummings, Ballard, El-Sheikh, & Lake, 1991). On the other hand, specific reactions change with age, especially between infancy and middle childhood (e.g., Cummings, 1987; Cummings et al., 1984).

For example, in comparison with preschoolers, infants and toddlers rarely mediate their parents' disputes, although they may attempt to comfort or distract the parents (Cummings et al., 1981, 1984). The disposition to mediate increases sharply at approximately preschool age (Cummings et al., 1984; see also J. S. Cummings et al., 1989) and may continue to increase until middle adolescence, thereafter dropping off (Cummings, Ballard, & El-Sheikh, 1991; Cummings, Ballard, El-Sheikh, & Lake, 1991).

However, greater experiential history and increasing age are not readily disentangled as factors contributing to vulnerability to discord. Furthermore, at different ages, children may be more vulnerable to different types of mental health problems. For example, infants and young children are more likely to exhibit aggression, noncompliance, and temper tantrums (Glasberg & Aboud, 1981, 1982). Dysphoria, passivity, and depression become more prevalent between late childhood and adolescence (Angold & Rutter, 1992; Rutter, 1986). Thus, the key question may not be which age is most harmed by marital discord but the vulnerability to specific problems and outcomes at each age. It is premature to claim that any one age is more vulnerable than others to negative outcomes or that the emotional insecurity induced by marital conflict is greater at one age than another.

Sex. Early studies reported stronger associations between discord and disturbance among boys than among girls (Robins, 1966; Rutter, 1970). However, aggressiveness and conduct problems are more common in boys, whereas withdrawal and anxiety are more prevalent in girls (Block, 1983; Block et al., 1986; L. D. Cohn, 1991). Greater reports of disturbance in boys may thus reflect the greater salience and disruptiveness of their problems, resulting in more clinic referrals, as opposed to greater emotional insecurity or difficulty in coping with marital discord (Whitehead, 1979).

Complicating the picture, sex differences in vulnerability may change with age. For example, among divorced families, boys are more susceptible to disturbance in early and middle childhood, whereas the sexes evidence similar levels of disturbance in late childhood and adolescence (Hetherington, Cox, & Cox, 1985; Zaslow, 1989). Also, in a 30-year longitudinal study,

the trend reversed at adolescence, with girls more susceptible than boys to psychopathology thereafter (Werner, 1989).

Mediating processes may also be different for boys and girls. In a recent study of 9–12-year-olds, Cummings, Davies, and Simpson (1994) reported that appraisals of the threat posed by marital conflict predicted adjustment in boys, whereas self-blame was linked to internalizing problems in girls. Furthermore, the appraised destructiveness of conflict was significantly related to perceived threat in boys and to self-blame in girls. One interpretation is that emotional insecurity is reflected in different psychological processes for boys and girls, with boys more prone to feelings of threat and girls more prone to self-blame. In sum, the pattern of findings does not justify any definite conclusions about the relative vulnerability of boys and girls to marital conflict.

Temperament. Susceptibility to feelings of emotional insecurity may also reflect temperament (Crockenberg, 1986; Wachs & Gandour, 1983). Children with difficult temperaments are less sensitive to positive events and more reactive to negative events than children with easy temperaments (Graham, Rutter, & George, 1973; Rutter & Quinton, 1984; Thompson, 1986; Wachs & Gandour, 1983). Difficult temperament is associated with insecure attachment (Belsky et al., 1989; Frodi & Thompson, 1985) and adjustment problems (Pettit & Bates, 1984).

The bidirectionality of effects merits attention. Studies of the impact of children on marriages are relatively scarce. Certain temperaments tax parental resources, caregiving abilities, and the marital relationship (Bugental, Mantyla, & Lewis, 1989; Lee & Bates, 1985; Mangelsdorf, Gunnar, Kestenbaum, Lang, & Andreas, 1990), fostering parental negativity (Anderson, Lytton, & Romney, 1986; Stevenson-Hinde & Simpson, 1982). Children's temperament thus may exacerbate negative marital relations, which, in turn, increases children's emotional insecurity and risk for further problems.

Impact of Marital Conflict on Parent–Child Relations

Our thesis is that children react to marital conflict in terms of implications for emotional security and that their emotional security is negatively affected by destructive marital conflict. However, marital conflict may also influence children's emotional security by affecting parent–child relations, another route for adjustment problems resulting from marital conflict (Crockenberg & Covey, 1991; Fauber, Forehand, Thomas, & Wiersen, 1990). Emotionality—both how it is expressed by parents and how it is managed by children—is vital to parent–child relations and interrelations between marital and parent–child systems. Emotional insecurity may be fostered by disruptions in parent–child relations arising from marital conflicts that leave parents less responsive, more hostile and rejecting, and less physically or emotionally accessible. On the other hand, secure parent–child attachments might buffer children from marital conflict (Emery, 1982).

We focus on two aspects of the parent–child relationship: (a) parenting and child-management practices and (b) the emotional attachment between parent and child. Other family systems, particularly sibling relationships, may also influence children's emotional security and adjustment. Siblings may help

each other regulate their emotionality during parental conflict (Cummings & Smith, 1993). However, few studies have examined the role of siblings in children's feelings of emotional security (e.g., see Stewart, 1983; Stewart & Marvin, 1984). Marital conflict may also undermine sibling relationships (Brody, Stoneman, & Burke, 1987; Brody, Stoneman, McCoy, & Forehand, 1992), with negative implications for emotional security within the family.

Parenting

Research has identified two classes of parenting impairment: (a) parental rejection, reflecting emotional negativity in parenting, and (b) child-management problems (see Cole & Zahn-Waxler, 1992; Patterson, 1982). The impact of these dimensions of parenting is outlined subsequently, and evidence for their relations with marital conflict is reviewed.

Parental rejection: Emotional negativity in parenting. Emotional negativity in parenting may contribute to children's emotional insecurity. Maternal negativity, intrusiveness, and withdrawal in interactions with children elicit anger, reduced activity, dysphoria, and social withdrawal, even in 3-month-olds (J. F. Cohn & Campbell, 1992; J. Cohn & Tronick, 1983). Depressive behavioral styles may be fostered, even in contexts outside of mother–infant interactions (J. F. Cohn, Campbell, Matias, & Hopkins, 1990). Parental rejection is associated with children's passivity, noncompliance, low self-esteem, lack of self-control, and reduced social competence (Bell & Ainsworth, 1972; Hetherington et al., 1992).

Parental rejection and children's externalizing disorders of aggression, delinquency, and acting out are frequently linked (Hanson, Henggeler, Haefele, & Rodick, 1984; Hetherington et al., 1992; Olweus, 1980; Stouthamer-Loeber & Loeber, 1986). Less often, children's internalizing symptomatology is predicted (Bakeman & Brown, 1980).

However, global assessments of parental rejection often subsume more specific emotional processes. At one extreme, rejection involves overt parental hostility; at the other, it may take the form of parental withdrawal and neglect. Thus, rejection is an index of emotional negativity in parenting, but expressions of negativity can take quite different forms.

These forms may carry different developmental consequences. Wolfe (1985), for example, reported that aversive child behavior was linked to parental abuse but not parental neglect. More generally, whereas global assessments of parental rejection are most closely associated with externalizing disorders, distinct assessments of withdrawal and overt hostility have resulted in the prediction of both internalizing (i.e., social withdrawal, depression, and anxiety; Denham, 1989; Hoffman-Plotkin & Twentyman, 1984; LaFreniere & Dumas, 1992; Pettit & Bates, 1989) and externalizing (Bousha & Twentyman, 1984; Sternberg et al., 1993) difficulties.

Table 5 shows the interrelations reported between marital conflict and parenting practices. Notably, all 13 of the studies that assessed emotion-oriented dimensions of parenting (i.e., emotional rejection, hostility, or unresponsiveness) found relations between these dimensions and marital conflict. Thus, conflict and parenting appear to be closely related when the parenting domain is shaped explicitly by emotion.

Table 5
Interrelations Between Marital Conflict and Parenting Practices

Study	Sample	Method	Results
Belsky, Youngblade, Rovine, & Volling (1991)	100 3-year-old children	Parent report; observations of parent-child interactions	Increases in marital conflict and discord across infancy and early childhood were associated with observations of (a) parental negativity and intrusive control for fathers and (b) parental warmth for mothers
Christensen & Margolin (1988)	24 5- to 13-year-old children	Home observation	Sequential analyses revealed that the probability of parent-child conflict increased significantly after the occurrence of marital conflicts
Cox, Owen, Lewis, & Henderson (1989)	38 couples and their 3-month-old infants	Parental interviews; observations	A composite measure assessing premarital spousal disengagement subsequently predicted low levels of maternal warmth and responsiveness during observations of mother-child interactions at 3 months after prenatal parental adjustment had been statistically controlled
Easterbrooks & Emde (1988)	35 1- to 2-year-old children	Laboratory observations; parent ratings	Observations of high marital discord during a conflict-resolution task predicted observations of low levels of parental warmth and involvement in parent-child interactions. Parent reports of disagreements over child rearing were strongly related to warm parent-child interactions ($r = -.75$)
Engfer (1988)	36 children during the 1st year of life (24 boys, 12 girls)	Observations; parent reports	Parental reports of marital conflict 4 months post-delivery were associated with concurrent ($r = -.28$) and 8-month postdelivery ($r = -.37$) observations of maternal sensitivity
Fauber, Forehand, Thomas, & Wierson (1990)	97 11- to 14-year-old children (51 from divorced families, 46 from intact families)	Parent, child, and teacher reports; laboratory observation of mother-child interactions	Structural equation modeling revealed that relations between marital conflict and child internalizing problems were mediated by parental rejection and use of guilt induction in controlling the child. Relations between marital conflict and externalizing problems were mediated in part by parental rejection and withdrawal. Parental use of lax child-management techniques was a relatively weak mediating factor in relations between marital conflict and child behavior problems
Floyd & Zmich (1991)	72 6- to 18-year-old children (38 mentally retarded, 34 typically developing)	Parental reports; observations	Home observations of aversive parent-child interactions were predicted by independent observations of spousal conflict and negativity ($r = .30$) and parent ratings of spousal criticism ($r = .23$). Maternal feelings of low parenting efficacy were predicted by maternal ratings of spousal criticism ($r = .58$) and observations of marital conflict ($r = .35$)
Hetherington et al. (1992)	202 9- to 13-year-old children (75 intact families, 69 divorced, 58 remarried)	Parent and child reports; home observation	A composite measure of marital conflict was related to composite measures of parental negativity (e.g., $r = .59$) and warmth (e.g., $r = -.29$). Marital conflict was generally unrelated to parental control and monitoring
Holden & Ritchie (1991)	74 2- to 8-year-old children (37 children of battered women, 37 matched controls)	Parent report; laboratory observations of mother-child interactions	The presence of marital aggression predicted maternal reports of high parenting stress, a lack of parental warmth, and inconsistency in child rearing and observations of parent-child conflict and low parental involvement. Maternal stress and parental hostility predicted child behavior problems in maritally violent families
Jouriles, Barling, & O'Leary (1987)	45 5- to 13-year-old children from maritally violent homes (23 girls, 22 boys)	Parent reports	Children's witnessing of high levels of marital violence was associated with their exposure to parent-child aggression ($r = .56$). Marital aggression was unrelated to maternal CBCL ratings of child behavior problems, whereas parent-child aggression predicted child conduct problems, attention deficits, and anxiety-withdrawal, after exposure to marital violence had been controlled

(table continues)

Table 5 (continued)

Study	Sample	Method	Results
Jouriles, Piffner, & O'Leary (1988)	60 1- to 2-year-old children (30 boys, 30 girls)	Parent report; observations of parent-child interactions	Parent reports of frequency of overt marital conflict predicted parental disapproval during interactions with boys but not girls
Miller, Cowan, Cowan, Hetherington, & Clingempeel (1993), Study 1	41 3-year-old children	All variables were composites of laboratory observations and parental reports	Exploratory path analysis indicated that the relation between positive marital interaction and fewer child externalizing problems was mediated by warm, responsive parenting styles
Miller et al. (1993), Study 2	62 9- to 13-year-old children	All variables were composites of home and laboratory observations and parental reports; the specific assessments used were often different from those in Study 1	Exploratory path analysis supported Study 1 results in finding that the association between positive marital communication and fewer child behavior problems was mediated by parental warmth and support
Stoneman, Brody, & Burke (1989)	47 4- to 9-year-old sibling pairs (23 female pairs, 24 male pairs)	Parental report; home observation of parent-child interactions	Parental OPS ratings were correlated with parental Q-sort ratings of inconsistent discipline (r s between .39 and .49) with girls but not with boys. Parental OPS ratings were associated with home observations of parent-child conflict and parental anger for girls but not for boys

Note. CBCL = Child Behavior Checklist (Achenbach & Edelbrock, 1983); OPS = O'Leary-Porter Scale (Porter & O'Leary, 1980).

The results are amenable to interpretation in terms of an emotional security hypothesis. Children's feelings of emotional security and their capacity for emotional regulation in the face of family stress (e.g., marital conflict) are undermined when they cannot be confident in terms of their parents' availability and predictability (Bowlby, 1973). Furthermore, hostile parenting is a direct threat to their sense of well-being.

Interestingly, the specific mechanisms formulated to account for the impact of parental rejection bear similarities to the processes hypothesized for the effects of marital conflict, perhaps reflecting common process pathways. Thus, infants and older children may model parental patterns of dysphoria and withdrawal (Field, 1987, 1992; Hetherington & Martin, 1979; Schwarz, 1979). Children's vicarious acquisition of the hostile and abusive styles of their parents has been proposed (Bandura, 1986; Eron, Monroe, Walder, & Huesmann, 1974).

Furthermore, parental rejection, like marital conflict, may produce an environment that is excessively challenging and negatively arousing for children (Field, 1987; Tronick, 1989). Children may, at first, respond to parental rejection and insensitivity with short bouts of distress and anger. Prolonged exposure may have long-term effects through its impact on children's representations of the family and the self. For example, children may learn to perceive their parents, and even the larger social world, as a threat, increasing their emotional insecurity. As a consequence, children's arousal systems may become sensitized and therefore difficult to regulate in social situations (Kopp, 1982). Deficits in modulation of arousal and behavior may underlie problems of aggression (Cummings & Zahn-Waxler, 1992) or withdrawal. The dampening effect on the arousal systems of withdrawal may contribute to unresponsiveness and internalizing difficulties (Field, 1987, 1992).

Child-management techniques. Child management refers to the practices used by parents to discipline, monitor, and control their children. Close monitoring, consistent discipline, and

authoritative parenting styles are generally considered optimal. Two styles of maladaptive child-management techniques have been identified. First, lax parental supervision and discipline predict children's aggression, noncompliance, delinquency, and criminality (Loeber & Dishion, 1984; McCord, 1979). Second, harsh, strict discipline predicts a similar pattern of aggression, impulsivity, and delinquency (Hetherington, Stouwie, & Ridberg, 1971; Loeber & Dishion, 1984; Weiss, Dodge, Bates, & Pettit, 1992) but also social withdrawal (Baumrind & Black, 1967; Crockenberg, 1987) and poor peer relations (Hart, DeWolf, Wozniak, & Burts, 1992; Pettit, Dodge, & Brown, 1988; see especially Loeber & Stouthamer-Loeber, 1986).

Table 5 also includes studies of relations between this dimension of parenting and marital conflict. Three of the five studies assessing child-management styles found relations with marital conflict. These findings suggest that heightened marital conflict may disrupt effective child management.

The processes traditionally proposed to account for the effects of ineffective child-management techniques are not as obviously related to emotionality and emotional security. Most of the models for mechanisms involve behavioral contingencies or social-cognitive mechanisms (Grusec & Goodnow, 1994; Lorber, Felton, & Reid, 1984; Patterson, 1982, 1986). However, there is increasing recognition of the role of emotion in child management and of the need for more satisfactory accounts of emotion processes (Hoffman, 1994; Kochanska, 1994; Perry, 1994).

For example, emotionality is salient in discipline situations. Fear and anxiety may disrupt children's processing, acceptance, and eventual internalization of parental discipline messages (Grusec & Goodnow, 1994). When negative emotional arousal is induced, social interpretations and judgments of others may become distorted, especially when children are already susceptible to emotional dysregulation (Dodge & Somberg, 1987). Children's preoccupation with their own distress may preclude

them from understanding and internalizing parental messages. Negative emotional arousal may also prime hostile representations of others or disrupt information-processing and attentional capacities (Dodge & Somberg, 1987).

The child's sense of emotional security also provides an "emotional context" for behavior in discipline situations. Londerville and Main (1981) found that insecurely attached children exhibited more active disobedience, noncompliance, and lack of self-restraint in discipline situations 9 months later. In a more specific experimental test of this hypothesis, Lay, Waters, and Park (1989) found that parental warmth elicited positive affect in children and that positive affect, in turn, heightened the children's compliance in comparison with those experiencing negative emotions.

Parent-Child Attachment

The quality of parent-child attachment is tied to children's feelings of emotional security. As outlined earlier, parent-child attachments optimally serve as a source of security for children, especially in times of stress, and foster behavioral exploration and emotional regulation. Securely attached children show less pervasive anxiety and distress than insecurely attached children (e.g., Grossmann, Grossmann, Spangler, Suess, & Unzer, 1985), and they function more optimally in a wide variety of social domains and contexts (e.g., Erickson et al., 1985; Schneider-Rosen & Cicchetti, 1984; Sroufe, Fox, & Pancake, 1983).

Although sometimes conceptualized as isolated predictors, attachment and children's feelings of emotional security are more properly viewed in terms of broader patterns of family functioning (Belsky et al., 1989; Greenberg & Speltz, 1988; Stevenson-Hinde, 1990). Insecure attachment may be a way of coping with family discord (Cummings & El-Sheikh, 1991), thus reflecting the motivational component of emotional security. For example, repeated rejection and physical abuse by parents predict avoidant child-parent attachments (Egeland & Farber, 1984; Kobak & Sceery, 1988; Lamb, 1987; Sroufe, 1985). Avoidance may serve an adaptive function by limiting children's involvement in stressful, pathogenic interactions with an abusive or rejecting parent (Bates & Bayles, 1988; Cassidy & Kobak, 1988; Crittenden, 1988; Kobak & Sceery, 1988).

Table 6 shows studies of relations between marital conflict and attachment, as well as related assessments of the emotional quality of parent-child relationships. The table shows that, for samples from infancy through adolescence, marital conflict is consistently associated with disturbances in the emotional relationship between parent and child.

Marital conflict may negatively affect attachment by increasing the negativity of parent-child interactions (Marvin & Stewart, 1990) or by decreasing parental involvement and emotional availability. Whereas secure attachments may buffer the impact of marital conflict, direct (exposure effects) and indirect (parenting and attachment) negative effects probably co-occur in most instances. Maritally distressed parents may rely on their children for the emotional support, dependency, and nurturance not present in the marital relationship (Stevenson-Hinde, 1990). Children may be pressured to ally with one parent against the other (Johnston et al., 1987; Vuchinich et al., 1988). These added demands foster insecurity (Byng-Hall, 1990), en-

meshment (Buchanan et al., 1991; Carlson, Cicchetti, Barnett, & Braunwald, 1989), and other difficulties (Lewis et al., 1984).

Important questions remain: If a child's attachment history is linked to troubled interparental relationships, how might this affect the quality of their own marriage in adulthood? In other words, is there an intergenerational transmission of insecurity in close family relationships (e.g., Ricks, 1985)? Does marital conflict affect a child's emotional relationship with both parents, or only one of them? Are effects on adjustment compounded when relationships with both parents are affected? What are the interrelations between internalized representations of security associated with parent-child attachments and marital relationships? Are there cumulative or interactive effects on the child's sense of emotional security within the family?

The possibility of common process pathways across family systems is suggested by research. For example, arousal processes are emphasized in accounts of the relations between attachment and child adjustment. That is, attachments are thought to play an important role in children's regulation of arousal and behavior when confronted with stress. The infant's first experiences with intense affective states, ranging from anger, fear, and anxiety to security, love, and happiness, are modulated in the context of attachment relationships (Bowlby, 1973). In comparison with those with secure attachments, children with insecure attachments are more vulnerable to fluctuating, unpredictable, and negative affective states (Bowlby, 1988). Enduring and intense negative emotions are particularly challenging for the rudimentary capacities of young children to regulate their emotions (Kopp, 1989); thus, such emotions may have long-term effects on children's adjustment. The security of parent-child attachments has also been related to adolescents' and young adults' capacity to regulate emotions and behavior when stressed (Dozier & Kobak, 1992; Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993; Kobak & Sceery, 1988).

In summary, marital conflict, parenting, and attachment intersect in their effects most clearly when emotion-oriented dimensions are assessed. Furthermore, the common processes and mechanisms of effect appear to pertain to children's arousal and regulatory capacities, which, in turn, are pertinent to children's risk for adjustment problems. In particular, the emotionality of both the marital and parent-child systems has implications for children's feelings of emotional security, with evidence for the impact of marital functioning on parent-child relationships.

Directions for Future Research

An emotional security hypothesis provides a conceptualization of children's emotional reactions, the emotion-related components of conflict, and other family factors that co-occur with or contextualize the effects of marital conflict. This theoretical foundation, in turn, suggests new directions in the study of the impact of marital conflict on children, towards the explication of specific pathways between marital conflict and children's developmental outcomes.

Contexts for Assessing Emotional Security

An emotional security perspective emphasizes the importance of stressful situations as contexts for measurement. Sim-

Table 6
Interrelations Between Marital Conflict and Child-Parent Attachment Relationship

Study	Sample	Method	Results
Camara & Resnick (1989)	82 7- to 9-year-old children (47 divorced, 35 intact)	Parent reports and interviews; child interviews	Parental verbal and physical conflict styles correlated with problematic parent-child relationships; parental conflict resolution (i.e., compromise) was predictive of healthy parent-child relations
Cox & Owen (1993)	38 1-year-old children (23 boys, 15 girls)	Observations of marital conflict; Ainsworth strange situation paradigm	A composite measure of marital conflict during prenatal and early infancy periods was associated with subsequent insecure and very insecure child-parent attachment patterns at 1 year
Engfer (1988)	36 children during the first 3.5 years of life (24 boys, 12 girls)	Parent reports	Marital conflict 4 months after delivery predicted concurrent maternal overprotectiveness, over-involvement, and role reversal in the parent-child relationship. High levels of marital conflict also predicted maternal overprotectiveness 1 year later
Forehand et al. (1991)	112 10- to 12-year-old children (56 divorced families, 56 intact families)	Parent, child, and teacher reports	High levels of parent-reported marital conflict predicted more problematic parent-adolescent relationships (parent and child reports). High levels of marital conflict and parent-adolescent relationship problems were strong predictors of concurrent and subsequent behavior problems (as rated by teachers)
Howes & Markman (1989)	20 1- to 3-year-old children	Mother and father reports	Time 1 and Time 2 parental reports of high marital conflict predicted insecure child-parent attachment on attachment behavior Q-set at Time 2 (assessed by parent report)
Isabella & Belsky (1985)	51 12-month-old infants (28 boys, 23 girls)	Parental report; Ainsworth strange situation paradigm	Insecure child-parent attachment at 12 months was predicted by greater increases in parent-reported marital conflict during the first 9 months
Kline, Johnston, & Tschann (1991)	184 2- to 18-year-old children of divorcing parents	Parent reports and interviews; clinician ratings	A composite measure of marital conflict during divorce mediation was related to difficulties in the parent-child relationship 1 year later, and these problems, in turn, were associated with child distress and behavior problems 2 years after divorce mediation
Peterson & Zill (1986)	1,080 12- to 16-year-old children (551 girls, 529 boys)	Parent and child reports	Parent reports of high marital conflict predicted child ratings of negative parent-child relationships, particularly with fathers

ilarly, attachment theory holds that the security of the parent-child emotional bond is less reliably assessed under harmonious or nonchallenging conditions; the stressful context of separation and reunion is given heavy emphasis in the strange situation paradigm (Ainsworth et al., 1978; Main & Weston, 1981). Although emotional security is evident across many situations, it becomes most salient when children are faced with stressful events (Sroufe & Waters, 1977).

Research contexts holding particular promise for future studies of emotional security include naturalistic expressions of parental anger (e.g., Cummings et al., 1981), experimental simulations of conflict and anger expression (e.g., J. S. Cummings et al., 1989), direct provocation (e.g., Dodge & Somberg, 1987), and parental separation and reunion (Zahn-Waxler et al., 1984; see Cummings, in press).

Emotional Security and Children's Regulation of Affect

Campos and colleagues (1989) have defined emotional regulation not simply as "feeling states indexed by behavioral expressions" (p. 394) but as "processes of establishing, maintaining, or disrupting the relation between the organism and the

environment on matters of significance to the person" (p. 394). Thus, from a functionalist perspective, a complex assessment of emotion regulation is indicated, including (a) subjective feeling states, (b) behavioral expressions of emotion, and (c) physiological assessments of autonomic arousal (Campos et al., 1989; Dodge, 1989; Kopp, 1989).

Only a handful of exploratory studies have examined multiple dimensions of responding. Cummings (1987) identified styles in the regulation of emotion in response to conflict across response domains of subjective feelings and emotional behavior. Furthermore, differences in emotion regulation have been related to physiological arousal as indexed by heart rate and blood pressure (e.g., Ballard et al., 1993; El-Sheikh et al., 1989). However, larger scale studies are needed if there is to be a more complete understanding of the role of children's complex patterns of regulating emotion.

Emotional Security and Children's Regulation of Marital Emotions

Is children's intervention in marital conflict in high-conflict homes adaptive in the short term because it terminates parental

disputes and therefore reduces emotional insecurity? Analyses of conditional responding between family members can examine whether children's interventions and misbehaviors suppress marital conflict (e.g., Hops et al., 1987). Are children who take responsibility for parents' conflicts, particularly those who frequently intervene, at greater risk for the development of psychological problems? Longitudinal study and assessment of responses to simulated conflicts is needed; otherwise, differences in marital conflict expression may compromise interpretation.

Emotional Security and Children's Internal Representations

Children's internal representations include their assessments of the characteristics of conflict and their ability to cope with conflict; weighing each against the other may organize children's sense of emotional security. More study of coping-related internal representations is needed. Such research could focus on the confidence for effectively regulating emotions in the context of marital conflict and on the sense of efficacy for improving or resolving discordant relations between adults.

Marital Conflict, Emotional Security, and Child Functioning: Explicating Pathways of Effect

According to the emotional security hypothesis, security is a central mediating mechanism between destructive styles of conflict and children's outcomes. Testing these pathways requires assessing relations between (a) exposure to certain styles of marital conflict and children's emotional security and (b) children's emotional security and their psychological functioning.

Marital conflict and emotional security. Evidence has been reviewed indicating relations among histories of marital conflict, children's negative emotional arousal, and intervention in response to conflict. Critical questions remain, however: Do different histories of exposure to marital conflict lead to different physiological (autonomic) responses to social stress? Does the repeated witnessing of destructive marital conflict relate to insecure internal representations of family functioning? Do these representations of family functioning, in turn, generalize to the larger social world? Are different styles of marital conflict related to coherent patterns of emotional security extant across multiple response domains?

Marital conflict, parent-child relations, and emotional security. As we have shown, a strong implication of the literature is that parenting problems are one potential mediator of relations between marital conflict and children's maladjustment. A challenge for future research is to map out, more precisely, relations among marital conflict, parenting disturbances, and child functioning. On the basis of an emotional security hypothesis, it is expected that the impact is greatest on those dimensions of the parent-child subsystem related to children's emotion regulation and security, especially the quality of parent-child attachments and the parents' emotional availability.

Recent methodological advancements facilitate the testing of more complex models of family risk factors. For example, Walker, Downey, and Nightingale (1989) discussed the advantages of certain statistical techniques (e.g., multiple regression

analysis) over other approaches (e.g., analysis of covariance and multivariate analysis of covariance) in examining the relationships between concomitant, multiple risk factors and child outcomes (see also Biddle & Marlin, 1987). Also, when sample sizes are sufficiently large, structural equation modeling may be useful for more complex theoretical models involving relations between multiple, co-occurring predictors and developmental outcomes.

Emotional security and children's functioning. Emotional insecurity may be manifested a variety of expressions influenced by individual differences between children in temperament, family background, and contexts of marital conflict. Different processes of emotional insecurity may be linked to certain forms of child maladjustment. Research is needed on the components of emotional security and their implications for children's functioning.

For example, does generalized negative emotional arousal represent a better characterization of emotional insecurity than do discrete emotions such as fear, anger, and sadness? Which level of analysis better predicts immediate functioning in the relation between marital conflict and child adjustment? For which children or under what circumstances does interparental conflict induce threat, self-blame, and loss (see Cummings et al., 1994)?

As another example, one element of emotional insecurity may reflect children's internal representations of parental conflict (Buchanan et al., 1991). Are different "insecure" concerns about interparental functioning linked to specific forms of child adjustment? Worries that marital hostility will spill over into parent-child relations could lead to children's chronic anxiety and social withdrawal. On the other hand, a primary concern that conflict will lead to family dissolution might increase children's involvement as mediators in marital conflict (in an attempt to "repair" bad relations between parents and maintain an intact family) or might result in acting out and aggression as means of distracting parents from their marital problems. More precise assessments of emotional security will lead to better delineated pathways of relations to children's developmental outcomes.

Buffers and resilience factors. The concern with emotional insecurity of children from discordant homes should not cause researchers to overstate the risk associated with exposure to anger and conflict, because children often cope effectively with these conditions; nor should it cause investigators to neglect the existence and important role of buffers and resilience factors in even very angry environments (Garmezy, 1985). Although theoretical discussions have outlined possible buffering effects of secure parent-child attachments, parental warmth, and children's easy temperaments and positive affect within high-conflict homes (e.g., Emery, 1982; Grych & Fincham, 1990), little systematic research has been devoted to directly testing these predictions.

Protective factors, however, are not necessarily intrinsically pleasant or desirable. In certain forms, these negative events may have "steeling" effects that facilitate the development of adaptive coping styles. The effect may be to reduce emotional insecurity, buffering children from the impact of subsequent stressors (Rutter, 1981, 1990). For example, parental conflict marked by resolution may teach children important lessons

about how to approach interpersonal disputes in constructive ways. However, little is known about what specific lessons children learn when exposed to resolved conflicts and how these lessons, in turn, may mediate psychological adjustment.

Marital anger could simply reflect a family tendency to express both positive and negative emotion, a pattern that has been associated with social competence in children (Cassidy, Parke, Butkovsky, & Braungart, 1992). High rates of positive affect in the proximal context of anger and conflict may reduce children's emotional insecurity, thereby "freeing" them to better understand how people manage and resolve disputes. Expressions of negative and positive affect may also elicit family discussions and explanations about the nature, causes, and constructive consequences of emotion that, in turn, have been linked with subsequent increases in socioemotional understanding (Dunn, Brown, & Beardsall, 1991).

Conclusion

In closing, we believe that it is important to put this literature in perspective. Fighting is surely a normal part of life, and conflicts within families and marriages may sometimes need to occur if important issues are to be worked out. Furthermore, exposure to constructive conflicts between parents may be beneficial in terms of teaching children how to handle their own inevitable conflicts in life (Montemayor, 1983; Niemi, 1988). Children's feelings of emotional well-being and capacity for emotion regulation may well be strengthened by exposure to such interactions. However, destructive forms of marital conflict undermine children's feelings of emotional security, leading to adjustment problems in children and to marital dysfunction (Margolin, John, & Gleberman, 1988; Margolin, John, & O'Brien, 1989). An emotional security perspective organizes the complex pattern of results and offers a direction for future research designed to provide an understanding of conflict processes within families and the pathways through which such processes affect children's adjustment.

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The Publications and Communications Board of the American Psychological Association announces the appointment of two new editors for 6-year terms beginning in 1996. As of January 1, 1995, manuscripts should be directed as follows:

- For *Behavioral Neuroscience*, submit manuscripts to Michela Gallagher, PhD, Department of Psychology, Davie Hall, CB# 3270, University of North Carolina, Chapel Hill, NC 27599.
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Manuscript submission patterns make the precise date of completion of 1995 volumes uncertain. The current editors, Larry R. Squire, PhD, and Earl Hunt, PhD, respectively, will receive and consider manuscripts until December 31, 1994. Should either volume be completed before that date, manuscripts will be redirected to the new editors for consideration in 1996 volumes.