

Effects of marital conflict on children: recent advances and emerging themes in process-oriented research

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Background: The effects of marital conflict on children's adjustment are well documented. For the past decade research has increasingly focused on advancing a process-level understanding of these effects, that is, accounting for the particular responses and patterns embedded within specific contexts, histories, and developmental periods that account for children's outcomes over time. **Methods:** As a vehicle for presenting an update, this review follows the framework for process-oriented research initially proposed by Cummings and Cummings (1988), concentrating on recent research developments, and also considering new and emerging themes in this area of research. **Results:** In this regard, areas of advancement include (a) greater articulation of the effects of specific context/stimulus characteristics of marital conflict, (b) progress in identifying the psychological response processes in children (e.g., cognitive, emotional, social, physiological) that are affected and their possible role in accounting for relations between marital conflict and child outcomes, (c) greater understanding of the role of child characteristics, family history, and other contextual factors, including effects on children due to interrelations between marital conflict and parenting, and (d) advances in the conceptualization of children's outcomes, including that effects may be more productively viewed as dynamic processes of functioning rather than simply clinical diagnoses. **Conclusions:** Understanding of the impact of marital conflict on children as a function of time-related processes remains a gap in a process-oriented conceptualization of effects. Based on this review, a revised model for a process-oriented approach on the effects of marital discord on children is proposed and suggestions are made for future research directions. **Keywords:** Marital conflict, marital disharmony, parenting, emotion, family functioning, attachment.

Effects of marital conflict on child development are well documented. Many of the associations, for example, in predicting children's internalizing and externalizing disorders, have been demonstrated repeatedly (e.g., Rutter, 1970; see reviews in Emery, 1982; Grych & Fincham, 1990). It can be said that a 'first generation' of research has successfully demonstrated the increased probability for children's disorders associated with marital discord, including effects on cognitive, social, academic, and even psychobiological functioning (e.g., Ellis & Garber, 2000; El-Sheikh, Harger, & Whitson, in press; Fergusson & Horwood, 1998; see review in Cummings & Davies, 1994a). Moreover, marital conflict negatively affects family functioning, including parenting (Cox, Paley, & Harter, 2001; Erel & Burman, 1995; Krishnakumar & Buehler, 2000) and sibling relationships (Dunn & Davies, 2001; Noller, Feeney, Sheehan, & Peterson, 2000; Stocker & Youngblade, 1999). Furthermore, interparental conflict has been implicated in the impact on children of divorce (Amato & Keith, 1991; Buchanan & Heiges, 2001), parental depression (Cummings & Davies, 1994b; Downey & Coyne, 1990), alcoholism (El-Sheikh & Cummings, 1998), and physical and sexual abuse (Appel & Holden, 1998; Howes, Cicchetti, Toth, & Rogosch, 2000; Jouriles, Norwood, McDonald, & Peters, 2001).

However, simply documenting statistically significant correlations between marital conflict and child adjustment problems, with no more demonstration than that, has reached a point of diminishing returns. Research and scholarship over the past decade reflects a move towards more complex, sophisticated perspectives on how children are affected by marital conflict. These new directions consider the operation of multiple factors and influences and their effects over time, and seek to identify the causal process(es) that underlie relations. This 'second generation' of investigation holds promise to increase insights into processes and pathways that underlie effects on children's development.

About a decade ago Cummings and Cummings (1988) proposed a framework outlining the requirements for achieving a process-oriented level of understanding of the effects of marital conflict on children (see Figure 1). Since little was known at this level of analysis at that time, the framework was largely meant to serve as a guidepost for directions for future research and model-building (e.g., Davies & Cummings, 1994; Grych & Fincham, 1990). Nonetheless, revisited for the purposes of the present review, the Cummings and Cummings framework provides a touchstone for charting progress over the past decade towards achieving a process-oriented

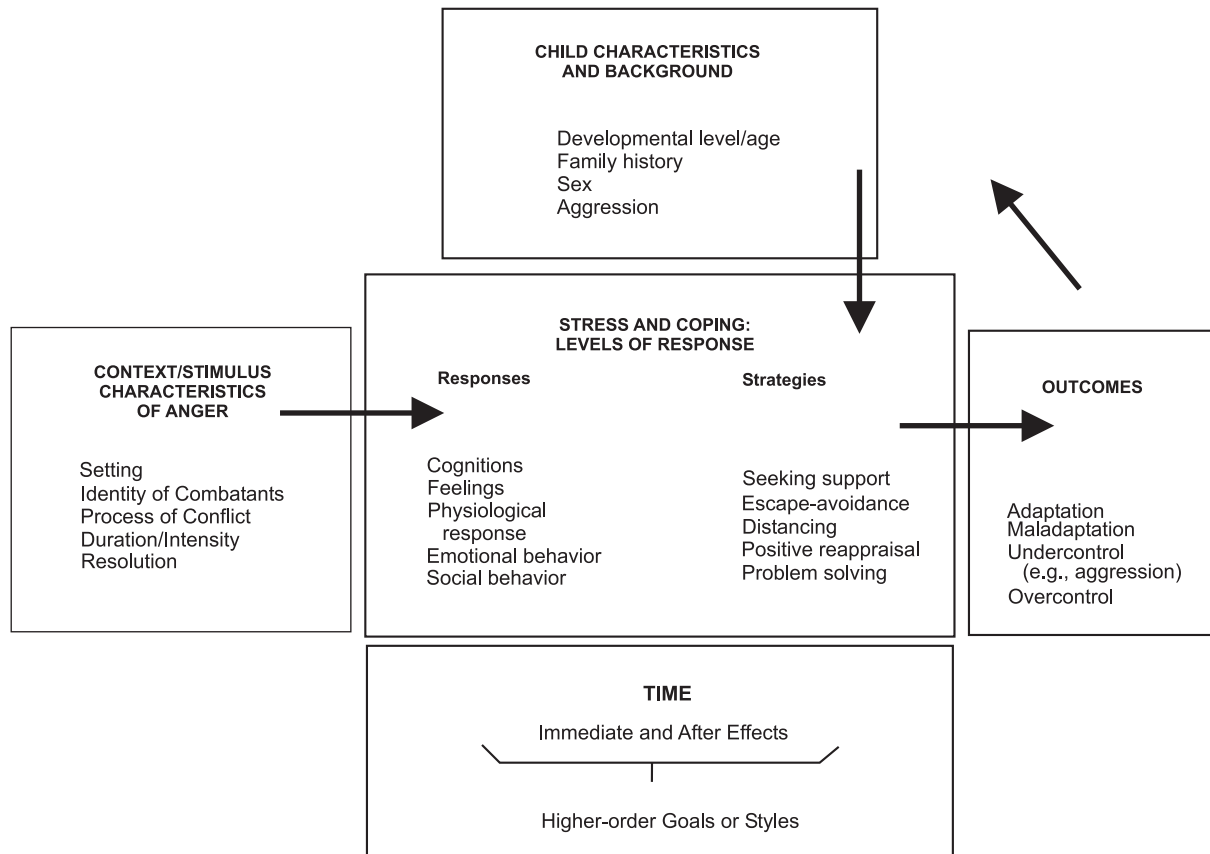


Figure 1 A framework for process-oriented approach to the study of the effects of marital conflict on children (Source: Cummings and Cummings, 1988)

level of understanding of the effects of marital conflict on children.

However, before proceeding, it is important to clarify what is meant by 'process-oriented' research. The aim of process-oriented research is to describe the specific responses and patterns embedded within specific contexts, histories, and developmental periods that account for effects on the children over time. Moreover, the interest is in process at dynamic level of analysis. Dynamic process refers to children's functioning in terms of the particular, often complex, organizations of social, emotional, cognitive, physiological and other processes that reflect children's interactions or functioning over time. Thus, the goal of a process-oriented approach is both to identify causal factors, and also to characterize how and why the psychological, physiological, or other responses operate over time as dynamic processes. In this regard, possible themes for process-oriented research include: (a) identifying and understanding the dynamic organizations of social, emotional, physiological, genetic, cognitive, and/or other processes that underlie effects of marital discord on children, (b) explicating the broader causal net (e.g., multiple processes, risk and protective factors) of influential factors and the nature of the interrelations between these factors as causal agents, and (c) identifying the familial, community, ethnic, cultural, interpersonal and other contexts

that influence causal processes and the interrelations between the various dimensions and levels of social contexts (see Cummings, Davies, & Campbell, 2000, for further discussion and practical examples).

As an example of a framework for this approach (see Figure 1), Cummings and Cummings (1988) identified several key areas for investigation towards advancing process-oriented levels of understanding, including (a) *Context/Stimulus Characteristics* – understanding of the effects on children of different context/stimulus characteristics of marital conflict; (b) *Stress and Coping: Levels of Response* – exploration of the psychological response processes in children (e.g. cognitive, emotional, social) mediating or moderating relations between marital conflict and child outcomes; (c) *Child Characteristics and Background* – study of individual child characteristics, family history and background, and other contextual factors as potential moderators or mediators of effects; (d) *Time* – greater exploration of time-related processes, including immediate effects and after effects; and (e) *Outcomes* – further exploration and differentiation of children's outcomes, including positive and negative child adaptational outcomes. Some of these elements have since become the subject of much study whereas relatively little remains known about other factors (e.g., time-related processes) (Fincham & Grych, 2001; Grych, 2001).

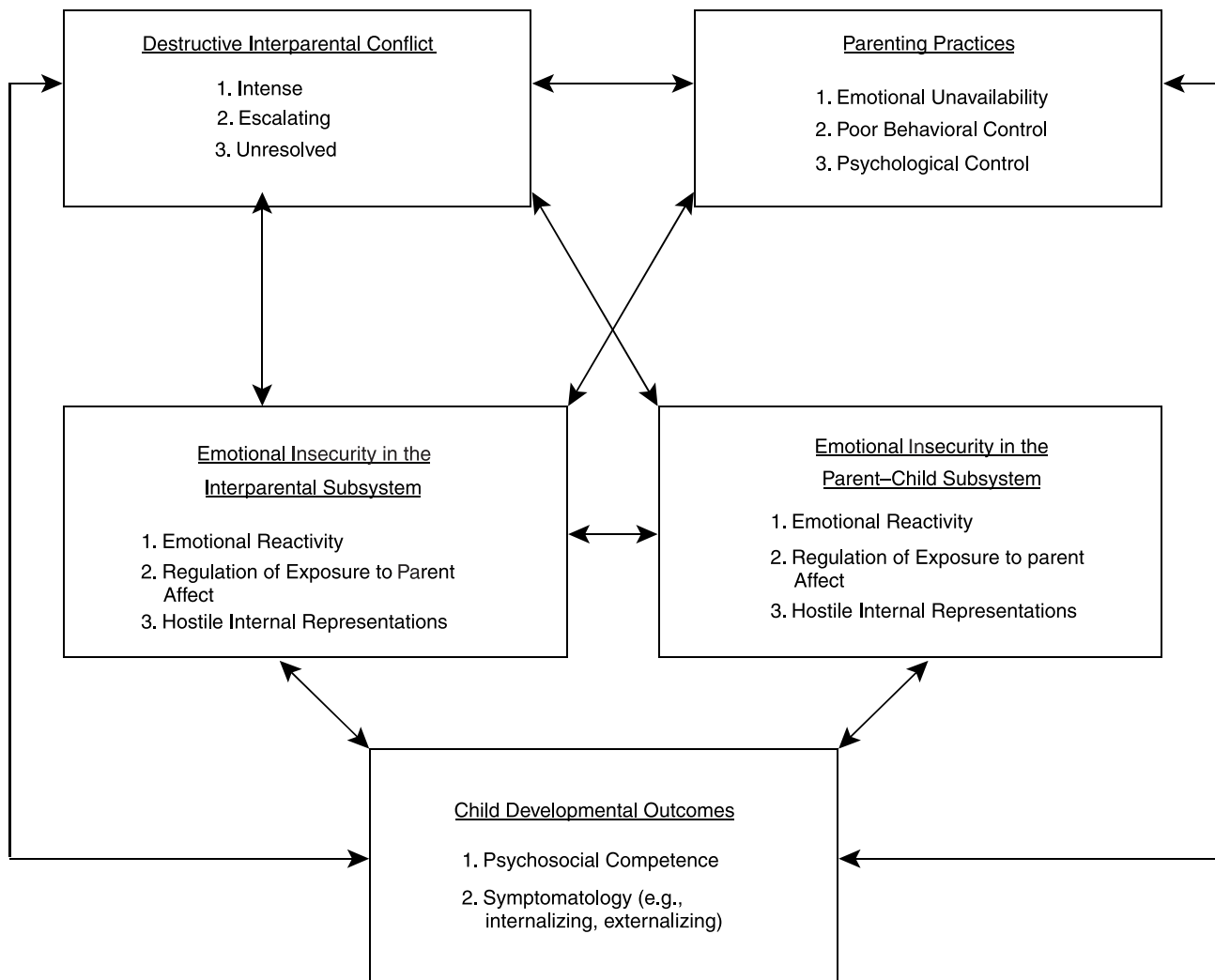


Figure 2 The joint influence of interparental and parent-child systems on emotional security as a mediator of child developmental outcomes

In addition, some directions in research have emerged, such as the study of the effects of marital conflict on children as mediated by changes in parenting (e.g., Buchanan & Waizenhofer, 2001; Frosch, Mangelsdorf, & McHale, 2000; Kitzmann, 2000; Webster-Stratton & Hammond, 1999).

Accordingly, as a vehicle for presenting this update, this review will follow the organization of Cummings and Cummings (1988), concentrating on recent research developments, and also considering new and emerging themes in process-oriented research on this topic. At the same time, it is important to recognize that marital conflict occurs in a family context, and that family factors (e.g., marital conflict, maternal depression, aspects of parenting) can have collinear effects on children's adjustment. For example, when parental depression and marital conflict co-occur, joint effects on children's adjustment are reported (Cummings & Davies, 1994b; Downey & Coyne, 1990). At the same time, indicating the particular impact of marital discord, considerable evidence indicates that marital conflict and violence predicts child outcomes even after

controlling for other family and ecological characteristics (Fergusson & Horwood, 1998; Fergusson, Horwood, & Lynsky, 1992; see Cummings & Davies, 1994a; 1994b). Given these facts, as a goal for research, it is important both to articulate a process-oriented model for the effects of marital conflict and to identify the multiple pathways of influence of marital conflict and other family factors (Cummings et al., 2000). Accordingly, this review initially focuses on a process-oriented account of the effects of marital conflict on children, and the latter part of the review considers emerging themes for studying marital conflict in a broader family context (Figures 2 and 3 outline some of the topics).

Context and stimulus characteristics

At the outset it is worthwhile to put the topic of marital conflict and children's functioning in some perspective. While interest has focused since the 1920s on the negative effects of marital conflict on children (Cummings & Davies, 1994a), conflict is

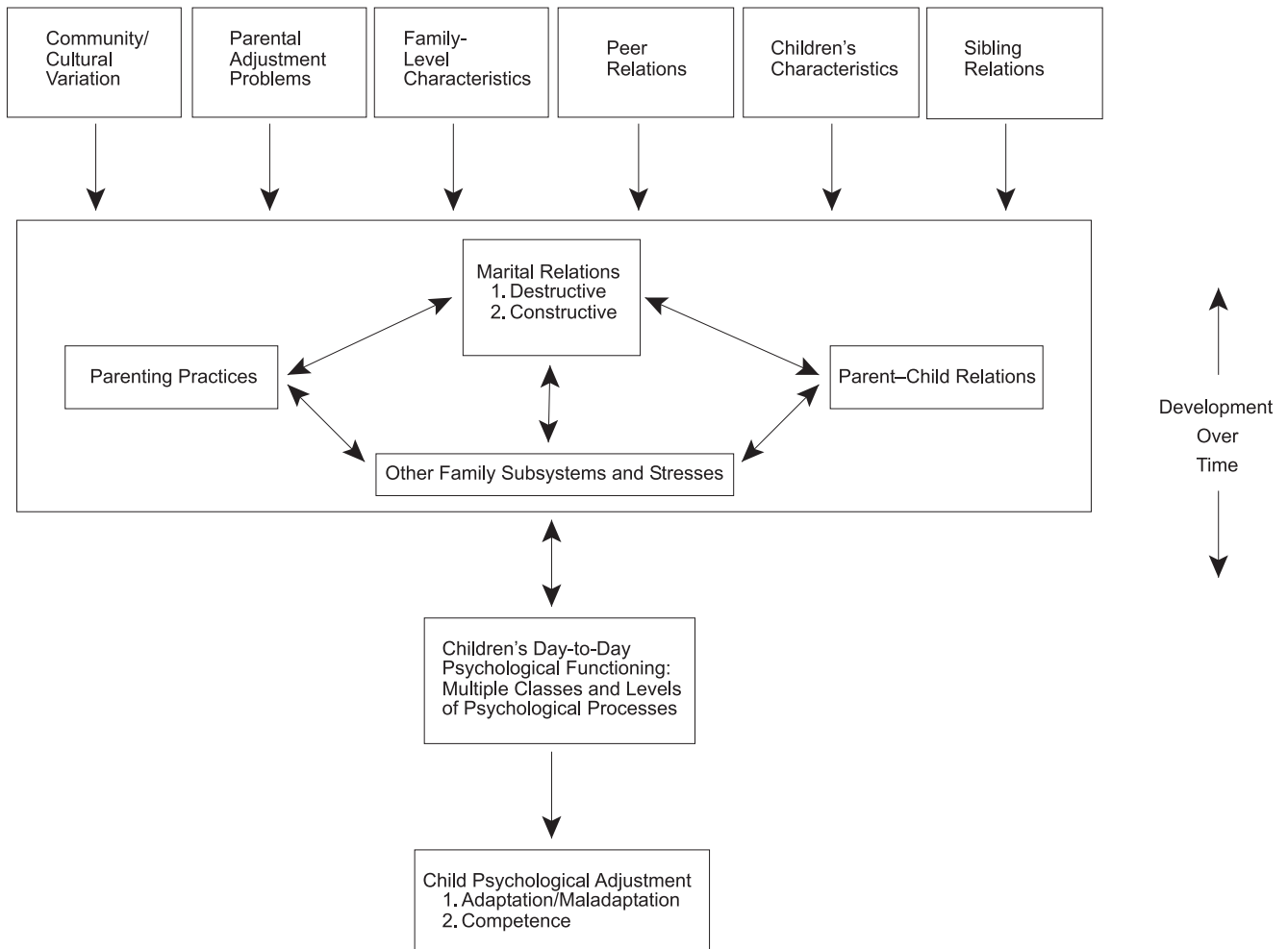


Figure 3 An updated framework for a process-oriented approach to the study of the effects of marital conflict on children

normal and unavoidable in marriages, especially if one defines conflict broadly to include any disputes, disagreements, or expressions of untoward emotions over everyday matters between the parents. Although developmental and child clinical psychologists are typically concerned with children's disorders, the majority of children evidence healthy socioemotional development. Intact marriages, particularly when harmonious, typically foster and advance children's well-being. Furthermore, despite the seeming assumption in pre-1980s research that marital conflict is a homogeneous stimulus, marital conflict, in fact, varies on multiple dimensions. Thus, different forms of marital conflict have differing effects on the children, with some forms having negative effects and others having benign or constructive effects. On the other hand, given the centrality of marital functioning to family circumstances, children's experiences with some forms of marital conflict are likely to have some lasting effects on their well-being. Thus, it follows that past history is likely to affect how children appraise and respond to interparental conflicts, so that effects on children are expected to be a function of both past exposure

history as well as current marital conflict stimuli (Cummings & Cummings, 1988; Davies & Cummings, 1994; Grych & Fincham, 1990).

In fact, carefully controlled laboratory and analogue studies have repeatedly found support for these propositions about the diversity and range of effects of marital conflict on children and the importance of historical context (e.g., Cummings, Vogel, Cummings, & El-Sheikh, 1989; Cummings, Ballard, El-Sheikh, & Lake, 1991; Cummings, Goeke-Morey, & Papp, in press). These studies include laboratory demonstrations that history of exposure to marital conflicts affects children's reactions (Davies, Myers, Cummings, & Heindel, 1999; El-Sheikh & Cummings, 1995). Moreover, field studies, including reports based on parental observational methodologies, affirm these conclusions (e.g., Cummings, Zahn-Waxler, & Radke-Yarrow, 1981; Cummings, Goeke-Morey, & Papp, in press; Garcia-O'Hearn, Margolin, & John, 1997).

Thus, children are clearly responsive to the stimulus characteristics of marital conflict. Children differentiate between child-related and non-child-related conflicts (Jouriles et al., 1991;

Grych & Fincham, 1993), and between marital and parent-child conflicts (El-Sheikh, 1997; El-Sheikh & Cheskes, 1995; Hall & Cummings, 1997). Moreover, children discriminate among forms of marital violence (Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996; Jouriles et al., 1998a, 2001), distinguish between physical and verbal aggression in marital conflicts (Cummings, Vogel, Cummings, & El-Sheikh, 1989), and identify parental threats to leave the marriage, or expressions of fear during marital conflicts, as particularly distressing (Cummings, Goeke-Morey, Papp, & Dukewich, 2001; DeArth-Pendley & Cummings, in press; Laumakis, Margolin, & John, 1998). Nonverbal expressions of anger and conflict and marital withdrawal, while seemingly subtle as expressions of discord, also elicit distress from children (Cox, Paley, Burchinal, & Payne, 1999; Cummings, Ballard, & El-Sheikh, 1991). Children's distress is diminished as a function of whether conflicts are resolved and the degree of resolution (Cummings, Ballard, El-Sheikh, & Lake, 1991). Children also benefit from other information about resolution, including (a) explanations of conflict resolution by the parents, or (b) the resolution by parents of conflicts behind closed doors (Cummings, Simpson, & Wilson, 1993). Finally, children are affected by the emotional and informational content of interparental conflict and conflict resolution (Shifflett-Simpson & Cummings, 1996), and are less distressed by non-resolution when parents express optimism about the ultimate outcomes of conflict (Cummings & Wilson, 1999).

Identifying constructive versus destructive marital conflict behaviors

This direction in research is particularly pertinent to the application of the findings of research in this area towards improving the well-being of children and families. An important question for parents, practitioners, and others concerned with the well-being of children and families is how parents can handle everyday differences better for the sake of the children. The message of research on children's responses to forms of marital conflict is that constructive and destructive marital conflict can be distinguished, with finer distinctions within each of these categories also suggested. Thus, investigations into the effects of contexts/stimulus characteristics of marital conflict have substantial implications for applied as well as theoretical issues. For example, such research may support the development of parent education programs for effectively teaching parents to better handle interparental conflicts (Shifflett & Cummings, 1999; Webster-Stratton, 1994).

However, questions remain about the bases or criteria for distinguishing between constructive and destructive conflict. Effects on children are not simply a function of the physical characteristics of parental conflict behaviors. In fact, the consensus of

current theory and research is that (a) effects on children are more a function of children's perceptions of the meaning of conflicts for themselves and their families than simply the frequency or even the physical characteristics of conflicts, and (b) the meaning of conflicts can be discerned from children's cognitive appraisals, emotional reactions, and coping behaviors (Crockenberg & Forgays, 1996; Davies & Cummings, 1994; Grych & Fincham, 1990). Accordingly, it follows that (a) categories of constructive versus destructive conflicts can be identified based on the effects on children (e.g., children's emotional and cognitive responses to, and appraisals of, marital conflict behaviors), and (b) these criteria are a more appropriate guide to making these distinctions than simply the frequency or physical characteristics of marital conflict behaviors.

In a recent review, Cummings (1998) distinguished between constructive and destructive marital conflict behaviors based on a variety of relatively diverse criteria of the impact on the children, including effects on children's adjustment and/or children's stress and coping responses. Behaviors identified as destructive included interparental aggression or violence, nonverbal conflict, withdrawal during marital conflict, interparental verbal aggression or hostility, aggression by marital partners against objects during marital conflict, conflicts involving threats to the intactness of the family (e.g., threats to leave), and conflicts about child-related themes. By contrast, behaviors identified as constructive included successful conflict resolution, any progress by the parents towards the resolution of the conflicts (e.g., changed the topic versus continued fighting), explanations by parents of how conflicts had been resolved, and even optimistic explanations of non-resolution of conflicts, for example, explanations by the parents that conflicts are not a serious threat, or that the conflicts would eventually be worked out.

A theoretical foundation for distinguishing constructive versus destructive conflicts

However, without conceptually based criteria for making this distinction, the matter of how to make this determination ultimately lacks sufficient foundation. In particular, the concept of the 'meaning of conflict' is vague and ill defined as a basis for making determinations between constructive and destructive conflict without further development. For example, how is the meaning of marital conflict defined from the children's perspective so that one knows on what basis or by what criteria a child decides whether a conflict is constructive versus destructive? That is, what are the goals that guide children's appraisals? In this regard, the emotional security hypothesis provides a conceptual basis, criteria, and foundation for distinguishing

constructive and destructive conflicts from the children's perspective (Davies & Cummings, 1994).

According to the emotional security hypothesis, the meaning of marital conflicts is assessed by children based on their appraisals of the emotional security implications of the conflicts. This assessment, in turn, can be discerned according to the theory from their reactions to exposure to marital conflict, in particular, their emotional reactions, intervention behaviors, and cognitive representations. At the same time, these reactions are also presumed to provide windows into dynamic process-level mediators of their adjustment over time (see Cummings & Davies, 1996; Davies & Cummings, 1994, for further discussion). With regard to these points, preliminary evidence supports the proposition of the theory that children's emotional, cognitive, and behavioral coping responses (i.e., mediation efforts) are related to children's histories of exposure to marital conflict, which might be presumed to contribute to children's construction of meaning (Cummings & Davies, 1994a). The data to date also support theoretical predictions that these responses are distinct process-level mediators of children's adjustment (Davies & Cummings, 1998; Harold & Shelton, 2000; Harold, Shelton, Goeke-Morey, & Cummings, 2001a), with very recent work providing evidence for these propositions based on prospective, longitudinal research (Harold, Shelton, Goeke-Morey, & Cummings, 2001b).

New directions in analogue tests of the constructive versus destructive distinction

Analogue methodologies that involve the presentation of well-defined marital conflict stimuli provide a valuable direction for exploring distinctions between constructive and destructive marital conflict behaviors. Advantages include that various dimensions of the family event can be precisely specified and presented in the same way across all participants, and explicit recording of responses on multiple dimensions (e.g., cognitive, verbal, emotional, physiological) can be accomplished. These elements make it possible to test hypotheses about causal relations under controlled conditions, and to differentiate effects due to variations in histories of exposure from responses due to the particular characteristics of the present family situations. This approach also minimizes interpretative problems for discerning the effects of specific marital conflict behaviors that limit field methodologies, including (a) correlations between conflict behaviors in 'real world' marital conflicts (Cummings, Goeke-Morey, & Papp, in press), (b) correlations between conflict behaviors and other family behaviors, such as parenting (Kitzmann, 2000) and (c) natural variations across individual parents in their expressions of the same conflict behaviors.

A new direction (Goeke-Morey, 1999) provides even greater experimental rigor than past procedures,

testing children's responses to many more precisely defined marital conflict elements than in past work. Children are introduced to marital conflict scenarios by means of vividly described vignettes, which are followed by brief, tightly defined, videotaped presentations of target marital conflict behaviors initiated by either a female (represented as the mother) or male (represented as the father). In past work marital conflict simulations often included multiple modes of expression of conflict by both adults during scenarios. Advantages of the new approach include: (a) children's responses are elicited to very precisely defined marital conflict behaviors enacted by only one parent (i.e., 'mother' or 'father'), so that one can better isolate effects, (b) the presentation of conflict stimuli is much briefer (i.e., a few seconds), and less repetitious without repeated presentations of conflict stems, and therefore more engaging, and (c) accordingly, many more scenarios can be presented in a single session, allowing for more precise, and statistically more powerful (i.e., repeated measures rather than between groups statistical tests), comparisons among children's responses to multiple dimensions of constructive and destructive marital conflict behaviors.

In particular, pertinent to the present discussion, recent studies have explored distinctions between constructive and destructive conflicts based on the criteria of the emotional security hypothesis (Goeke-Morey & Cummings, 2001). For example, Goeke-Morey (1999) made comparisons among children's reactions to multiple marital conflict vignettes based on children's reports of emotional responses during exposure to these vignettes. According to a functionalist perspective on emotions, supported by tenets of the emotional security hypothesis (Davies & Cummings, 1994), children's emotional responses to family interactions are particularly valuable as reflecting their appraisals of the meaning (i.e., emotional security implications in this case) of social and interpersonal events (i.e., marital conflict in this instance).

Thus, the valence of children's emotional reactions in response to exposure to marital conflict provides a conceptually grounded basis for making a determination of the constructiveness versus destructiveness of marital conflict behaviors from the children's perspective. Taking this reasoning a step further, Goeke-Morey (1999) proposed that marital conflict behaviors that elicited significantly more negative than positive emotional reactions from children could be regarded as 'destructive', due to the fact that they reduced children's sense of emotional security as evidenced by heightened negative emotional responding. Marital conflict behaviors that elicited significantly more positive than negative emotional reactions were classified as 'constructive'. The basis for this classification is the demonstration that exposure to the behaviors increased children's sense of emotional security, as shown by the

increase in positive emotionality induced by exposure to these events.

To apply and test these criteria, 4–11-year-old children were presented with a series of video clips reflecting a variety of commonly occurring marital conflict behaviors, including behaviors occurring during, or at the end of, conflicts. Clips were presented with either mothers or fathers initiating each behavior, allowing for distinctions between the constructiveness versus destructiveness of behaviors depending on which parent initiated the behaviors. Little systematic research has been done on the impact of marital conflict as a function of which parent initiated the behaviors (Fergusson & Horwood, 1998; Fincham & Grych, 2001; see review in Cummings & O'Reilly, 1997). Physical aggression towards persons, physical aggression towards objects, threat, verbal anger, nonverbal anger, and marital withdrawal emerged as behaviors that were appraised as destructive behaviors when occurring *during* interparental conflicts. Affection and humor (mothers only) were seen as constructive. Destructive ways to *end* conflicts included cold shoulder, unresolved verbal conflicts, and agreed to disagree (fathers only). Constructive ways to end conflicts included apology, compromise, changed topic (fathers only), and agreed to discuss later (fathers only).

Notably, little difference in responding was found as a function of parent gender for behaviors initiated by a parent during marital conflict scenarios. However, assessments of conflict-ending behaviors indicated that the gender of the parent engaging in the behaviors was a significant factor for a reasonably high proportion of all of the behaviors assessed (3 of 8), and for 100% (3 of 3) of the partial resolution behaviors examined. For example, fathers finding a way to leave the topic without clearly labeling the outcome was seen as constructive (changed the topic, agreed to discuss later), or destructive (agreed to disagree), whereas mothers ending matters in these ways was seen as neither constructive nor destructive by the children. Thus, children appeared more prone to make categorical interpretations of fathers' partial resolution strategies (i.e., as either constructive or destructive) whereas mothers' partial resolution strategies were interpreted as inconclusive with regard to the ultimate meaning of the conflict for the parents (i.e., destructive versus constructive).

In a further extension of this work, Goeke-Morey, Cummings, Harold, & Shelton (2001) employed a similar analogue methodology to examine the responses of 11- and 12-year-old Welsh children to analogue presentations of marital conflict vignettes. Using the criteria described above based on the emotional security hypothesis, constructive (support, problem solving, affection) and destructive (threat to the intactness of the marriage, physical aggression towards the spouse or with objects, marital pursuit and withdrawal, nonverbal anger,

verbal hostility) behaviors were identified. Moreover, child-centered conflicts were found to be more destructive than non-child-centered conflicts. Finally, criteria of children's representations of marital conflicts and behavioral interventions (e.g., tendency to mediate) also supported these distinctions. Thus, multiple indices of children's evaluations of the meaning of marital conflict behaviors according to the tenets of the emotional security hypothesis supported similar distinctions between constructive and destructive conflicts (see also Goeke-Morey, Cummings, & Du Rocher Schudlich, 2001). Additional data collection is ongoing towards the further specification of destructive and constructive marital conflict behaviors both for the US and Welsh samples based on large-scale, prospective longitudinal research designs in a collaborative cross-national venture.

New directions in field tests of the constructive versus destructive distinction

Confidence in findings is increased when replicated based on both laboratory- and home-based methodologies. Current research also tests children's reactions to forms of parental expressions of conflict behaviors in the home based on parental diary procedure. Completion of daily records about marital events in the home by spouses has a long history in marital research (Margolin, 1987). This approach yields day-to-day records, including accounts of emotional and cognitive as well as behavioral responses, of marital interactions between spouses. Advantages include less demand on memory than questionnaires and the ability to assess specific events rather than global impressions. Spousal perceptions are a significant level of analysis in their own right, and may be more predictive than an outside rater's coding of marital behaviors due to incorporation of information about the personal meaning of interactions (Fincham, 1998).

Questions have been raised about whether such records can be sufficiently reliable to be considered objective records of marital exchanges. In much of the research in the adult marital interaction literature, parents have not been trained in the use of daily record instruments, which commonly present lengthy lists of sometimes ambiguously worded response items to be completed on a daily basis. In fact, the scant evidence available suggests that increased interspousal reliability can be obtained by training the parents. Elwood and Jacobson (1988) reported that nearly doubled kappa agreement coefficients were obtained when spouses obtained training, which was significantly higher than the interspousal agreements found in couples that did not receive training. While percent agreements were still relatively low (61–62% with training vs. 39–40% without training), the training was limited, consisting only of spouses comparing their own checklists

with each other and discussing disagreements over a 15-day period. There is certainly much room for improved training procedures. Elwood and Jacobson (1988) concluded that the results challenged the view that married couples are too biased to permit reliable observation (p. 165).

Daily record procedures have also been employed to obtain data on children's responses to marital conflicts (Cummings et al., 1981; Cummings, Zahn-Waxler, & Radke-Yarrow, 1984; Garcia-O'Hearn et al., 1997). Interestingly, although only a small handful of studies concerning children's responses to marital conflict based on daily records completed by the parents have been published, parents participating in research concerning children's reactions to marital conflict have typically received relatively extensive training. Moreover, in one instance, 85% agreement was found between parents and trained research assistants in reporting about the parent's anger expressions and their children's responses in the home (Cummings et al., 1981). Thus, the (rare) instances of parents receiving explicit training by researchers on the parents' use of daily records strongly contradicts the conventional wisdom that parents cannot be reliable observers than the work of Elwood and Jacobson.

Nonetheless, the Cummings et al. procedures had limitations. The method required parents to dictate highly detailed narratives about family events into a tape recorder. One problem with narrative reports is that observers may not include all of the aspects of conflict behavior that are important. The completion of narratives is time-consuming for the reporter, and narratives are expensive and time-consuming to transcribe. The demands for composing narratives self-selects highly educated and affluent families, potentially reducing the applicability of the procedure to the study of culturally diverse families.

A new direction features extensive training of mothers and fathers to accurately describe what happens at home, with the testing of their reliability as observers both before and after home reporting (Cummings, Goeke-Morey, & Papp, in press). Moreover, in response to the limitations of requiring parents to dictate narrative records, diary reports only require the parents to complete brief checklists concerning marital and child emotions and behaviors during interparental interactions, thereby increasing the accessibility of the methodology to a broader sampling of adults, including adults with limited verbal skills. Thus, the breadth, precision, and user-friendliness of the assessment of marital and child functioning by means of parental home reports is increased. Preliminary results support that parents are highly reliable observers when adequately trained and can provide detailed narrative records over an extended period (Cummings, Goeke-Morey, & Dukewich, 2001; Cummings, Goeke-Morey, Papp, & Dukewich, 2001).

New directions in the use of parental daily reports have also advanced the study of a broader sampling of parents' everyday disagreements than in past research. As we have indicated, research has traditionally focused only on negative, or even highly negative (e.g., marital violence), instances of marital disputes, thereby providing a skewed, and likely overly negative, picture concerning children's responses to expressions of marital discord (Cummings, 1998). For understanding the full purview of children's reactions to marital conflicts, the conceptualization of interparental discord needs to be revised. Notably, children may be affected by everyday differences of opinion between the parents that are handled in a neutral or constructive manner (e.g., conflict resolution, Cummings & Davies, 1994) as well as by those events handled in a destructive manner. While most research has narrowly focused only on highly negative forms of marital conflict, inclusion of a broader range of everyday contexts of marital interactions around differences between the parents is likely to advance understanding of the role and range of effects of marital conflict on children's functioning. A more encompassing definition conceptualizes couple conflict as any major or minor interparental interaction that involves a difference of opinion, whether it is mostly negative or even mostly positive (Cummings, Goeke-Morey, & Dukewich, 2001).

Preliminary analyses indicate the reliability and utility of this new methodology for use with diverse samples (Cummings, Goeke-Morey, & Papp, in press; Cummings, Goeke-Morey, Papp, & Dukewich, 2001; Papp & Cummings, 2000). Moreover, the pattern of findings generally supports the results concerning distinctions between constructive and destructive marital conflicts based on analogue research. That is, children show increased emotional *insecurity*, as indexed by children's behavioral and emotional responses according to the criteria of the emotional security hypothesis, in response to categories of marital conflict behavior and emotion found in laboratory research to be destructive. Also consistent with theory and the results of analogue research, responses indicative of children's increased emotional *security* (e.g., elevated positive emotional responses) have been observed in children's response to categories of marital conflict behaviors and emotion found to be constructive in the laboratory (Cummings, Goeke-Morey, & Papp, in press; Cummings, Goeke-Morey, Papp, & Dukewich, 2001; Papp & Cummings, 2000).

Interestingly, while laboratory studies have focused on the impact of marital conflict *strategies* on children's functioning (see Shifflett-Simpson & Cummings, 1996, for an exception), the home-report data suggest that parents' *emotional expressions* (happiness versus anger, sadness or fear) during marital conflict may be as significant, or more significant, in predicting children's emotional and behavioral reactions to episodes of marital conflict.

This finding is consistent with the documented role that emotional expression plays in the well-being of adults and other family members in the marital conflict literature (Gottman, 1994).

Summary and future research directions

Substantial progress has been made over the past decade in delineating the effects of forms and contexts of marital conflict on children (see Figure 1). The fact that longitudinal studies of these questions are ongoing at several laboratories in the United States and United Kingdom (Cummings, Goeke-Morey, & Papp, in press; Davies & Forman, 2000; Goeke-Morey, Cummings, & Du Rocher Schudlich, 2001; Harold & Shelton, 2000; Harold, Shelton, Goeke-Morey, & Cummings, 2001a, b) offers promise for further advances in the future, especially with regard to understanding of cause and effect relations regarding the effects of the forms and contexts of marital conflict on the children. These large-scale studies will also permit examination of the importance of individual children's histories to distinctions between constructive and destructive conflicts. In particular, the identification of typologies of marital behaviors and emotional expressions that are demonstrated in research to be constructive or destructive from the children's perspective promises to advance the take-home message of the research.

Another important, long-term direction and goal for research in this area is to find ways to effectively communicate, even teach, the findings regarding constructive versus destructive marital conflict behaviors to clinicians and parents, towards the ultimate goal of improving the well-being of children and families (e.g., Cowan & Cowan, 1999; Jouriles, et al., 1998b; Shifflett & Cummings, 1999; Webster-Stratton, 1994). It is also important to seek to differentiate the role of broader aspects of the entire marital/adult relationship in the effects of conflict processes on children, both for their inclusion in any programs towards improving marital relationships (e.g., also improving the overall positivity and warmth of marital relationships) and towards greater understanding of the factors that may moderate the effects of particular conflict strategies on the children. For example, it may be that conflicts occurring in a marital relationship which is otherwise warm and caring may have different effects on children than conflicts characterized by the same dimensions occurring in a marital relationship where there is also a lack of loving and positive interaction.

Stress and coping: levels of response

A key argument in the framework proposed by Cummings and Cummings (1988) is that adequate explanation of the effects of marital conflict on

children requires understanding the processes underlying relations between marital conflict and child outcomes. Adjustment problems in children are conceptualized in terms of adaptation and development, that is, patterns of responding to situations in context that change over time. Processes of change are complex and multidimensional and are also dynamic and ever subject to change. Nonetheless, this level of analysis, while admittedly daunting, is at the heart of understanding of causality and etiology (Cummings, Davies, & Campbell, 2000; Grych, 2001).

As no one level of analysis can fully describe coping, Cummings and Cummings proposed that it was necessary to consider several levels of analysis, each of which yields a useful perspective on coping, including coping responses, coping strategies, and higher-order coping styles. Moreover, it was posited that these elements may be interrelated but may also define independent aspects of the process. Thus, given that significant questions remain, as in 1988, about how to conceptualize the dynamic psychological processes mediating or moderating development, it remains necessary and important to examine these various levels of analysis.

Another area of advance since 1988 has been with regard to how to conceptualize the psychological processes accounting for children's development due to the transactions between environment and experience over time, including concepts of mediators and moderators (Cummings et al., 2000). Mediators are the generative mechanisms by which an independent variable (e.g., marital conflict) influences outcomes (e.g., child adjustment) (Baron & Kenny, 1986). Mediators, by definition, are conceptualized as explaining, at least in part, how and why risk factors (e.g., marital conflict) lead to maladaptive outcomes. In other words, the fundamental aim is to delineate the processes that account for the linkage between a particular risk factor (or set of risk factors) and psychological problems. Rather than searching for a single causal mechanism that accounts for the impact of a risk factor, an assumption of much current theory, supported by the findings of research, is that *multiple* causal mechanisms may be operating (Cox et al., 2001; Cummings et al., 2000; Dunn & Davies, 2001; Grych, 2001; see Figure 1).

Moreover, the goal of a process-oriented perspective is more than simply a statistical modeling of variables related to child outcomes. The adequate measurement of process variables, and the articulation and demonstration of how and why processes serve as mechanisms for children's adjustment and functioning in specific developmental contexts, are also required for process-level explanation. Thus, statistical demonstrations in themselves may be regarded as a necessary, but not sufficient, condition for articulating the processes underlying children's development and adjustment over time.

Cummings and Cummings (1988) outlined an array of psychological processes that may underlie effects of marital conflict on children (see Figure 1). Little was known, in fact, about the relations of many of these processes to marital conflict at that time. The past decade has seen vigorous research concerning many of these processes, and much advance in understanding the pertinence of these processes in children's functioning in association with marital conflict behaviors.

Coping responses

Cognitions. The notion that impact of marital conflict on cognitive processes may underlie the effects on children's development is well supported by research and theory. Prospective longitudinal research has indicated the role of cognitions as mediators of child outcomes over time (Harold & Conger, 1997; Harold, Fincham, Osborne, & Conger, 1997). Although the search for processes underlying effects has focused on mediators, cognitions as moderators are also of interest to process models if they change the size of relations between family variables and child outcomes (Bradley & Corwyn, 2000; El-Sheikh & Harger, in press). That is, because moderator models tackle the question of 'who is at risk' and 'when is the risk most potent', they are also informative for the study of process.

With regard to theory, the cognitive-contextual framework proposed by Grych and Fincham (1990) places special emphasis on the effects of marital conflict on children's cognitive processes and the role of cognitive processes in affecting children's emotions and behaviors. Research from this tradition has placed special emphasis on children's cognitions of self, including self-blame and perceived threat to self, as being affected by marital conflict. Evidence has accumulated to support effects of marital conflict on these cognitions, with support for the notion that self-blame may be especially elevated in girls and perceived threat to self increased in boys, although the pattern of findings on gender differences is not entirely consistent across studies (Cummings, Davies, & Simpson, 1994; Grych, 1998; Grych, Seid, & Fincham, 1992; Kerig, 1998). Moreover, perceived threat and self-blame have been shown to act as mediators or moderators of the effects of marital conflict on children's internalizing disorders (Dadds, Atkinson, Turner, Blums, & Lendich, 1999; El-Sheikh & Harger, in press; Grych, Jouriles, Swank, McDonald, & Norwood, 2000).

For example, Grych, Fincham, Jouriles, and McDonald (2000) provided a recent test of the notion that children's appraisals of self-blame and threat mediated the associations between interparental conflict and children's adjustment problems. These relations were tested in two samples of children, one drawn from the community and the other taken from a battered women's shelter. Perceived threat and

self-blame both mediated relations between marital conflict and children's internalizing disorders for boys, regardless of the sample. Both categories of appraisals also mediated relations between interparental discord and internalizing problems for girls in the shelter sample, but only perceived threat mediated relations for girls from the community sample. While the gender differences in this study are difficult to explain, the findings support the notion that children's perceptions of the implications for self of interparental conflict shape the impact of these family events on aspects of self-functioning (i.e., internalizing problems). On the other hand, neither of these categories of cognitions mediated links with externalizing problems, consistent with the notion that how children relate to others (i.e., externalizing problems) may be affected by different processes than how children feel or think about themselves (i.e., internalizing problems). In addition, no support was found for the role of these categories of cognitions in moderating children's adjustment for either sample. Thus, the findings suggest that these categories of appraisals play a more prominent causal role as mechanisms underlying the development of internalizing disorders (i.e., mediational model) than in affecting the strength of the association between marital conflict and child adjustment (i.e., moderational model).

Reflecting another direction in theory, the emotional security hypothesis posits that children's representations of family relationships are one of several indices of their emotional security about family relationships and also constitute a class of dynamic processes mediating children's development over time as a function of family relationships, including the nature of marital conflicts (Davies & Cummings, 1994). Considerable evidence has emerged to suggest that children's representations of family relationships are sensitive to current exposure to marital conflict (Cummings & Davies, 1994a). Moreover, children's representations of family relationships have been shown to be affected by histories of exposure to marital conflict (Davies & Cummings, 1998; Harold & Shelton, 2000; Harold et al., 2001a, b). The latter relations have been shown in field research as well as demonstrated through laboratory manipulations of marital conflict histories (Davies et al., 1999; Grych, 1998).

It also follows from the emotional security hypothesis that children's representations of self (e.g., Grych, Fincham, Jouriles, & McDonald, 2000) and family, including multiple family relationships, may be affected by exposure to marital conflict. With regard to the latter, Shamir, Du Rocher Schudlich, and Cummings (2001) examined whether forms of marital conflict predicted children's representations of multiple family systems and relationships, including mother-child, father-child, marital, and triadic (mother, father, child) relationships. In order to assess children's representations of family,

5–8-year-old children were asked to provide narrative descriptions in response to story-stems about topics concerning various family systems. In addition, fathers and mothers independently completed questionnaires assessing specific dimensions of their marital conflict strategies (e.g., stalemating, collaboration, physical aggression, see Kerig, 1996) and various dimensions of parenting styles (acceptance, behavioral control, psychological control).

Mother's and father's specific marital conflict strategies were each related to children's representations of all four categories of family systems. In particular, negative marital conflict strategies predicted more negative representations of parent–child (mother–child, father–child) as well as interparental and triadic (mother, father, child) family systems. As a practical example of a negative representation of the marital relationship, one child said in response to one of the marital story-stems: 'The Mom and Dad are arguing. They keep blaming each other. "You made the mess." "No, you did." Then the Dad hits Mom and leaves the house.' Recent research has called increasing attention to the negative effects of even relatively subtle expressions of marital conflict, such as withdrawal from marital discussions (Cox, Paley, & Payne, 1997; Katz & Gottman, 1997). In this regard, it was interesting that stalemating was linked with children's negative representations of all four of the family systems that were assessed, a more consistent pattern of findings for mothers and fathers than for any other single dimension of marital conflict behavior. By contrast, the lone positive marital conflict strategy assessed (i.e., collaboration) was associated with less negative representations of all of these family systems.

Moreover, children's negative representations of marital relationships were related to negative representations of parent–child relationships and positive representations of marital relationships were linked with positive representations of parent–child relationships. As a practical example of a positive representation of the mother–child relationship, one child said in response to a father–child story-stem: 'The Dad tells the child that she should be careful next time and gets a band-aid for her. He kisses her finger and they all feel better.' Thus, children's representations of family relationships were not compartmentalized to particular relationships (e.g., positive for parent–child; negative for marital) but the positivity versus negativity of children's representations tended to be consistent across relationships (i.e., positive marital predict positive parent–child). In part, these links surely reflect that the qualities of marital relationships and parenting are interrelated (Erel & Burman, 1995; Krishnakumar & Buehler, 2000). However, these relations may also reflect that children form representations of family systems that are based on a composite perspective on the socioemotional climate in the home due to their experiences with multiple family systems.

Consistent with a family-wide model for the effects of family experiences on children's functioning, consideration of the influence of other dimensions of parenting (i.e., parenting styles) added to understanding of children's representations of family relationships (Belsky, 1984; Cummings et al., 2000). Interestingly, negative marital conflict strategies were much more consistently related to negative representations of all family systems than were parenting styles, whereas fathers' positive parenting styles (i.e., acceptance, behavioral control) were most closely associated with positive representations of multiple categories of family relationships.

Finally, numerous studies have shown that children's evaluations about the current status and future course of interparental relationships follow closely from the current characteristics of marital conflict behaviors. Thus, children describe more negative cognitions about unresolved conflicts and are more pessimistic about the future course of marital relationships than when faced with resolved conflicts (e.g., Cummings & Wilson, 1999). Moreover, these expectations can be created by manipulation of marital conflict histories in the laboratory. Thus, children exposed to couples that fail to resolve conflicts over and over again give relatively negative evaluations even for conflicts that have yet to be decided, whereas the opposite holds for children exposed to couples who consistently resolve or otherwise constructively handle their disagreements (Davies et al., 1999; El-Sheikh & Cummings, 1995).

In summary, these findings indicate that children's cognitions about self and family relationships are affected by exposure to marital conflict. Moreover, analogue studies and recent research directions inspired by the cognitive-contextual framework (Grych & Fincham, 1990) and the emotional security hypothesis (Davies & Cummings, 1994) indicate that a relatively broad range of children's cognitions are influenced by exposure to marital conflict behaviors (see also Grych & Cardoza-Fernandez, 2001). Furthermore, consistent with the notion that forms of marital conflict have family-wide implications for children's emotional security (Cummings & Davies, 1996), recent evidence suggests that children's cognitions about both fathering and mothering, as well as about the marital relationship, may be sensitive to the relative constructiveness versus destructiveness of marital conflict styles (Shamir et al., 2001). These directions in research require further development and replication. In addition, more research is needed into whether cognitions may sometimes moderate the effects of marital conflict on children. Surely, given the relations between age and cognitive functioning, study of age-related effects are a particularly important direction for future research (Jenkins & Buccioli, 2000).

Emotional behavior and feelings. Research using a variety of methodologies (e.g., diary, survey,

observational, experimental-analogue) has clearly demonstrated that children react to interparental and interadult conflict with elevated levels of fear, distress, and anger across multiple domains of responding (Cummings & Davies, 1994a). Children's emotional reactivity is not just a matter of their feelings, but is indexed potentially by a variety of categories of responding, including their overt emotional behavior (e.g., behavioral signs of distress) and their covert emotional feelings (e.g., self-reported feelings of fear) (Cummings & Davies, 1996). These overt and covert emotional reactions may or may not correspond (e.g., a child might look ok but report feeling angry) and may define somewhat different aspects of emotionality (e.g., Cummings, 1987); thus multiple indices of responding are ideally obtained in indexing emotional reactions. The increasing significance of process models of marital conflict (e.g., Crockenberg & Forgays, 1996; Davies & Cummings, 1994; Emery, 1989; Grych & Fincham, 1990; Jenkins, 2000; Wilson & Gottman, 1995) has brought about a sharper focus on the role that emotions play in the context of histories of experiences in the family, broader patterns of reactivity to conflict, and children's subsequent traits and adjustment patterns.

Conceptual models inspired by the functional perspective place particular significance on the role of emotion in children's reactivity to conflict (Saarni, Mumme, & Campos, 1998; Thompson & Calkins, 1996). Serving dynamically as causes, symptoms, and products of the goals, emotions are regarded as internal monitoring and guidance systems, with the function of appraising events, motivating behavior, and shaping coping responses (e.g., Crockenberg & Langrock, 2001; Cummings & Davies, 1996; Jenkins, 2000). Interpreted within the emotional security hypothesis, children's negative emotional reactions to interparental conflict regulate and are regulated by the goal of preserving emotional security. Negative emotional reactivity, in turn, serves as a causal agent in the reattainment of emotional security. That is, it highlights the potential threat in high conflict homes and energizes children's psychological and physical resources so that they can quickly appraise and cope with the stress (Davies, Forman, Rasi, & Stevens, 2000). As such, negative emotional reactions are interrelated with other component processes of emotional security, including hostile internal representations of interparental relations and regulation of exposure to parental conflict (e.g., intervention, avoidance; Davies & Cummings, 1994). In sharing similar functionalist propositions, complementary models have also highlighted the significance of the interplay between children's other goals (e.g., revenge) and specific emotions (e.g., sadness, anger), especially as they pertain to understanding gender differences (Crockenberg & Forgays, 1996; Crockenberg & Langrock, 2001) and pathways between marital conflict and peer relations (Jenkins, 2000; Parke et al., 2001).

The cognitive-contextual framework also conceptualizes negative emotion as a part of a dynamic chain of cognitive and emotional responses to interparental conflict (Grych & Fincham, 1990). Negative appraisals and expectancies brought about by earlier family experiences are hypothesized to fuel children's negative affective reactions. The bidirectional interplay between cognitive representations and emotional arousal, in turn, motivates children to reduce emotional arousal through emotion-focused (e.g., avoidance) and problem-focused (e.g., intervention) coping strategies.

Various theories share the hypothesis that various emotional reactions will be a correlate and predictor of children's social behaviors, coping, and cognitions. Different patterns of regulating emotions predict subsequent differences in children's aggressiveness, self-reported distress, and negative cognitions in the context of interadult anger (e.g. Cummings, 1987; El-Sheikh, Cummings, & Goetsch, 1989). Children's negative emotionality can play a causal role in priming children's subsequent distress reactions and negative appraisals to interadult anger (Davies & Cummings, 1995). Reports of children's emotional reactions to parental conflict have been associated with involvement and avoidance in interparental disputes, behavioral dysregulation (e.g., aggression), and hostile representations of the meaning interparental difficulties have for the welfare of the self and family (Davies & Cummings, 1998; Davies, Forman, Rasi, & Stevens, 2000; Davies, Harold, Goeke-Morey, Cummings, Shelton, & Rasi, 2001). Moreover, some theories propose that specific emotions (e.g., mad, scared) have particular links with specific behaviors and outcomes. For example, fear is expected to be linked with withdrawal and internalizing problems, whereas anger is hypothesized to be associated with attacks on others and externalizing problems (Crockenberg & Langrock, 2001).

Higher levels of distress and anxiety have been hypothesized to mediate the link between exposure to destructive histories of parental conflict and children's subsequent adjustment. Thus, the sensitization hypothesis predicts that prolonged exposure to destructive interparental conflict (e.g., intense, escalating, violent, unresolved) engenders progressively more negative emotional reactions (e.g., distress, anxiety). Sensitization may hold some, albeit temporary, adaptive value for children from high conflict homes. Given that conflict in discordant homes is likely to continue for longer periods, escalate into destructive expressions of anger, and proliferate to include the child, emotional distress and arousal may alert children to potential threat in the interparental relationship. These reactions may also serve to energize psychological and physical resources necessary to cope and regain some semblance of emotional security.

In support of theoretical accounts of sensitization, children have been shown to exhibit greater distress

after prolonged exposure using a variety of methodological designs, including field studies of children's reactions to actual marital conflicts (Cummings et al., 1981; Davies, Forman, Rasi, & Stevens, 2000; Garcia, O'Hearn, Margolin, & John, 1997), laboratory simulations of conflict (Cummings, Iannotti, & Zahn-Waxler, 1985; Davies, Myers, Cummings, & Heindel, 1999; El-Sheikh & Cummings, 1995), and quasi-experimental studies that integrate reports of marital conflict in the home with laboratory and analogue assessments of children's reactivity to conflict (J.S. Cummings, Pellegrini, Notarius, & Cummings, 1989; Cummings, Vogel, Cummings, & El-Sheikh, 1989; Davies & Cummings, 1998; Gordis, Margolin, & John, 1997; Grych, 1998; O'Brien, Bahudar, Gee, Balto, & Erber, 1997).

Although sensitization may be adaptive in the context of chronic histories of interparental conflict, the long-term consequence of this greater distress is an increase in the risk for forms of psychological maladjustment. Emery (1989) proposed a three-component model: (a) marital conflict is an aversive event that produces distress in children; (b) children's misbehavior (e.g., aggression, temper tantrums) plays an instrumental role in distracting parents from their dispute and hence reducing their exposure to aversive stimuli; and (c) misbehavior will be more likely to be re-enacted in the future because of the function it serves the child and family (i.e., reduction and elimination of an aversive stimulus). As this negative reinforcement process continues, children may show increasingly strong, persistent aversive behaviors that contribute to the risk of broader patterns of behavior problems. Likewise, the emotional security hypothesis maintains that difficulties of regulating intense vigilance and distress reflect underlying insecurity that may place children at risk for disturbances in more pervasive domains of psychological functioning (Cummings & Davies, 1996; Davies & Cummings, 1998; Thompson & Calkins, 1996). Consistent with this mediational model, high levels of distress in response to parental conflict have been shown to predict both externalizing and internalizing symptoms (Davies & Cummings, 1998; Davies, Forman, Rasi, & Stevens, 2001; Davis, Hops, Alpert, & Sheeber, 1998; Harold & Conger, 1997; Harold et al., 2001a, b).

Continued progress in delineating the correlates, origins, and consequences of emotional processes require further specification and testing of multivariate models. Future work may also usefully differentiate between different forms of emotional reactivity and regulation. For example, functionalist theories have stressed that specific forms (e.g., sadness, fear, anger) and expressions (e.g., inhibiting overt affect) of emotion reflect differences in goal selection and attainment, socialization experiences in the family, and long-term adjustment patterns (Crockenberg & Forgays, 1996; Davies & Forman, 2000; Jenkins, 2000). In fact, some measures of

emotional reactivity and arousal may moderate the risk posed by marital conflict to children (Ingoldsby, Shaw, Owens, & Winslow, 1999; Katz & Gottman, 1995; 1997).

Physiological response. Physiological arousal has been regarded as an integral index of emotion in some accounts of marital conflict (e.g., Cummings & Davies, 1996; Cummings & Zahn-Waxler, 1992). The interplay between emotional and physiological arousal may be a prime candidate as a mediating process between exposure to parental conflict and children's functioning (Katz, 2001). Significant changes in children's physiological response systems occur during exposure to interadult anger, including changes in heart rate (El-Sheikh et al., 1989; El-Sheikh, 1994), systolic blood pressure (El-Sheikh et al., 1989; Ballard, Cummings, & Larkin, 1993), and skin conductance (El-Sheikh & Cummings, 1992). Nevertheless, little is known about how physiological functioning and reactivity relate to: (a) other indices of children's coping and reactivity to conflict, (b) children's histories of exposure to family processes, and (c) children's maladjustment and competence.

Progress has been made in outlining the interparental and intrachild correlates of cardiovascular reactivity to parental or interadult anger (e.g., Ballard et al., 1993; El-Sheikh, 1994; El-Sheikh, Ballard, & Cummings, 1994; El-Sheikh et al., 1989; Gottman & Katz, 1989; Katz & Gottman, 1995; 1997). However, the small, complex corpus of findings makes it difficult to draw any firm conclusions about the role of cardiovascular functioning in angry homes. For example, El-Sheikh (1994) reported that exposure to interparental verbal aggression and discord was associated with heart rate increases in response to interadult conflict (i.e., greater physiological arousal), whereas interparental physical aggression predicted heart rate declines for boys. One plausible interpretation is that sensitization of children's emotional and physiological systems in high conflict homes may be more pronounced for girls (see Davies & Lindsay, 2001), while for boys declines in heart rate in physically aggressive homes may reflect greater attention and vigilance to the possibility of danger to their own well-being (e.g., El-Sheikh, 1994; Jouriles & Norwood, 1995). The multidimensional nature of the cardiovascular construct (e.g., heart rate reactivity, suppression of vagal tone, blood pressure) and the likelihood that different dimensions reflect different organismic processes having distinct developmental roots, correlates, and sequelae make interpretation challenging (Cummings, Davies, & Campbell, 2000). For example, rather than serving as mechanisms that mediate the effects of marital conflict, some indices of cardiovascular functioning may actually act as moderators that buffer (e.g., high basal vagal tone, high suppression of vagal tone) children from the

risk posed by marital conflict (e.g., Katz & Gottman, 1995, 1997). For example, El-Sheikh, Harger, and Whitson (in press) recently reported that higher vagal tone buffered 8- to 12-year-olds from adjustment and health problems associated with exposure to marital conflict.

Future directions include expanding inquiries into other domains of physiological functioning, including skin conductance reactivity (see El-Sheikh & Cummings, 1992; El-Sheikh, 1994), brain electrical activity (e.g., Dawson et al., 1999; Pollack, Cicchetti, Klorman, & Brumaghim, 1997), and adrenocortical activity (Stansbury & Gunnar, 1994). Adrenocortical activity, commonly indexed by cortisol levels, may provide a particularly valuable index of children's emotional arousal and threat in the context of marital conflict. As a 'hormone of energy', cortisol is released slowly in response to different types of stimulation, including psychosocial stressors. Because a primary function of the system involves marshaling physical and psychological resources and maintaining homeostasis through resource allocation, cortisol measures may be less subject to extraneous organismic processes (e.g., physical activity, changes in attentional focus) (Cummings, Davies, & Campbell, 2000; Fox & Card, 1999; Stansbury & Gunnar, 1994).

Social behavior. Marital conflict has also been shown to predict children's problematic social behavior (see review in Cummings & Zahn-Waxler, 1992; also see Cummings, Hennessy, Rabideau, & Cicchetti, 1994). Given links between marital conflict and children's conduct problems, the demonstration of such relations when alternative explanations for children's functioning are controlled in the laboratory is significant. Studies of effects of marital conflict on peer and sibling relationships are also pertinent to this question (see below). However, multiple pathways may well account for these relations, including effects mediated by changes in parenting practices associated with marital conflict as well as effects associated with exposure to marital conflict (Harold & Shelton, 2000). Accordingly, future directions in research should include tests of multiple pathways for the prediction of conduct problems due to marital conflict.

Coping strategies

Two primary classes of coping have been consistently differentiated in models of interparental conflict: emotion-focused and problem-focused coping strategies (Kerig, 2001). Problem-focused strategies reflect attempts to alter the stressor through problem solving and, thus, primarily involve attempts to intervene (e.g., mediate, distract, comfort) in the marital dispute. On the other hand, emotion-focused coping strategies, which are seen in children's attempts to change their own emotional states,

include escaping or avoidance, positive reappraisal, support seeking, and distancing in response to conflict (Cummings & Cummings, 1988; see Figure 1).

Coping behaviors in the emotional security hypothesis are examined as strategies of regulating exposure to interparental conflict. Accordingly, emotional insecurity serves a motivational function by guiding children to regulate their exposure to stressful parental emotion (Cassidy, 1994). Insecurity within this domain may be manifested in the 'overregulation' of exposure to parent affect, shown through overinvolvement in parental conflict, or, alternatively, prolonged, rigid strategies for avoiding conflict (Davies & Cummings, 1994; Davies, Forman, Rasi, & Stevens, 2000; Cummings & Davies, 1996). As a component process of insecurity, regulation of exposure to parental affect was originally proposed to be a mediator of the link between marital conflict and child adjustment (Davies & Cummings, 1994). Given that interparental conflict in the home is more likely to continue for long periods, get progressively worse, and proliferate to include other family members, children from these homes may be motivated to restore some semblance of security through avoiding the conflict (Cummings & Davies, 1996) or mediating the dispute in an effort to stop the conflict (Emery, 1989).

Studies examining relations between forms of interparental conflict, forms of regulating of exposure to parent affect, and child adjustment have yielded weak to modest support for the mediational model. For example, some studies have shown that children from high conflict homes are more likely to use intervention (Cummings et al., 1981, 1994; J.S. Cummings et al., 1989; Cummings et al., 1989; Davies, Forman, Rasi, & Stevens, 2000; Jenkins, Smith, & Graham, 1989; O'Brien et al., 1991) and avoidance strategies (Davies, Forman, Rasi, & Stevens, 2000; Garcia O'Hearn, Margolin, & John, 1997; O'Brien, Margolin, & John, 1995), whereas other studies have reported complex or nonsignificant associations (Davies & Cummings, 1998; Gordis et al., 1997; Harold & Shelton, 2000; Ingoldsby et al., 1999; O'Brien et al., 1997; O'Brien, Margolin, & John, 1995). Likewise, although some research has reported that the two forms of regulating exposure to interparental conflict predict children's psychological maladjustment (e.g., Buchanan, Maccoby, & Dornbusch, 1991; Davies, Forman, Rasi, & Stevens, 2000; Jenkins et al., 1989; O'Brien et al., 1997), other studies have reported null, complex, or even counterintuitive findings (Davies & Cummings, 1998; Harold & Shelton, 2000; Ingoldsby et al., 1999). Thus, questions remain about whether regulating exposure to parent affect is a successful way of reducing exposure to stress or a dysfunctional regulatory process that increases psychological risk (Cummings & Davies, 1996; Fuhrman & Holmbeck, 1994; Sandler, Tein, & West, 1994).

Future directions include greater sensitivity to the multidimensional nature of avoidance and involvement (Davies, Forman, Rasi, & Stevens, 2000). For example, the characteristics of the regulation strategy, rather than the mere presence, may have implications for adjustment. Avoidance and intervention strategies that require little emotional and psychological investment on the child's part may be adaptive for their long-term development (e.g., positive reappraisal, distracting oneself through play), while comparable strategies that require considerable expenditure of resources or burden of caregiving may pose a substantial risk for children (e.g., signs of role reversal, hastily fleeing the room).

Higher-order goals or styles

A process-oriented approach not only demands systematic disaggregation and dissection of multiple dimensions of various response domains, but the synthesis and integrating of multiple response domains to capture children's adaptation (Cummings & Cummings, 1988). Advances in synthesizing the study of process have emerged from the use of two empirical strategies: (1) variable-based mediator models, and (2) person- or pattern-based models.

Variable-based mediator models. Classes of variable-based multivariate analyses – primarily consisting of path models, multiple regression analyses, and structural equation modeling – are particularly valuable in simultaneously examining multiple response processes in models for the effects of marital conflict on children. However, few studies have directly examined the entire mediational model; the primary focus has been on testing the viability of a single domain or small subset of response processes (i.e., cognitive processes) as mechanisms mediating marital conflict (e.g., Buchanan et al., 1991; Feldman & Downey, 1996; Harold & Conger, 1997; Harold et al., 1997; Stocker & Youngblade, 1999).

Multi-mediator models are needed to comprehensively test theories. For example, Davies and Cummings (1998) specified a multi-mediator model to test the hypothesis that the three components of emotional security (i.e., emotional reactivity, regulation of exposure to parent affect, internal representations) mediated links between destructive marital conflict and children's internalizing and externalizing symptomatology. The results supported the conceptualization of emotional reactivity and internal representations as mediators of marital conflict, but forms of regulating exposure to parent affect failed to mediate the effects of marital conflict. In a more recent study designed to overcome many of the methodological limitations of the earlier research, Harold and Shelton (2000) reported remarkably similar results supporting the mediational model for emotional reactivity and internal representations but not for regulation of exposure to

parent affect. In sum, while research designed to more comprehensively examine multiple response processes as mediators is still only in its early stages, specifying multi-mediator models of children's response processes is a fruitful direction for future research.

Higher-order response patterns. Another way to integrate the study of multiple processes is through the search for coherent higher-order patterns or styles of adaptation to marital conflict across multiple response domains. An argument for this approach is that variable-based, multivariate statistical models (e.g., SEM, multiple regression analyses) may not fully capture the distinctiveness and complexity of patterns of responding.

Cummings and colleagues (1987; El-Sheikh & Cummings, 1989) identified three higher-order response patterns to background anger on the basis of a holistic evaluation of children's reactions to interadult anger across multiple response domains, including social and emotional behavior, self-reports of emotion and cognition, and physiological functioning. Children who evidenced *concerned* patterns of responding were hypothesized to be adaptive. For example, Cummings and Davies (1992) hypothesized that concerned patterns of responding evolve from warm, supportive family relations and, in turn, set the stage for competent developmental trajectories. By contrast, children who evidenced *ambivalent* or *unresponsive* patterns of responding were interpreted to be potentially maladaptive. For example, these patterns are thought to result from exposure to chronic family adversity, and were expected to increase children's vulnerability to specific forms of psychopathology. Detailed descriptions and discussions of these patterns are available elsewhere (Cummings & Davies, 1994a).

More recently, guided by the emotional security hypothesis, Davies and colleagues continued the search for coherent profiles of children's reactivity in the context of parental conflict (Davies & Forman, 2001; Davies, Forman, & Lindsay, 1999), identifying three primary styles of children's emotional security. In outline (see the references for detailed treatments), *secure* children exhibited concern in response to parental conflicts, but the broader pattern of responding suggested that this concern was well regulated and embedded in a larger context of security. *Dismissing* children displayed high levels of overt emotional reactivity (e.g., distress, physiological reactivity) and low levels of felt negativity and hostile internal representations. Thus, the disparity between overt and subjective signs of insecurity were interpreted to constitute a dismissing-insecure pattern reflecting attempts to suppress subjective experiences of threat (e.g., Kobak, Cole, Ferenz-Gilles, Fleming, & Gamble, 1993). *Preoccupied* children displayed insecurity by heightened emotional reactivity, regulation of exposure to parent affect, and

hostile internal representations. Moreover, children exhibiting these different patterns of security evidenced distinct profiles of psychosocial adjustment and experiential histories with interparental conflict (Davies & Forman, 2001). However, although extremely intriguing, especially given the conceptual importance ascribed to an organizational perspective on psychological functioning in current theory (e.g., Cassidy & Shaver, 1999; Cicchetti & Cohen, 1995; Sroufe & Waters, 1977), more research is needed to explore the validity of these patterns.

Parenting and family-related effects as mediational pathways in process models

Another emerging direction in recent years is the examination of changes in children's psychological processes mediating adjustment through changes in family functioning.

Research on so-called 'indirect effects' models underscores that family processes such as parenting practices and parent-child relations (e.g., attachment security) may constitute a significant pathway mediating the effects of interparental conflict on children's adjustment (Cox et al., 2001; Davies & Cummings, 1994; Erel & Burman, 1995; Krishnakumar & Buehler, 2000). In support of this model, parental emotional unavailability (e.g., rejection, hostility, unresponsiveness), poor behavioral control (e.g., lax monitoring, inconsistent or harsh discipline), and psychological control (e.g., guilt induction, love withdrawal, dominating conversation) have been shown to account for a part of the association between interparental conflict and child adjustment (e.g., Fauber, Forehand, Thomas, & Weirson, 1990; Gonzalez, Pitts, Hill, & Roosa, 2000; Harold et al., 1997; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993; Stocker & Youngblade, 1999). Moreover, in accordance with the spillover hypothesis (Erel & Burman, 1995; Margolin, Christensen, & John, 1996), distress, hostility, and preoccupation resulting from marital difficulties have been demonstrated to carry over into parenting practices, leading to impairments in parenting and ultimately child functioning (Jouriles & Farris, 1992; Mahoney, Boggio, & Jouriles, 1996; Kitzmann, 2000).

Because empirical tests of the direct (i.e., effects due to exposure to marital conflict, see above) and indirect effects models of marital conflict are rarely examined in the same study, integrating the study of direct and indirect pathways into a unifying theory of marital conflict is currently an important undertaking. As an example, building on both the emotional security hypothesis and attachment theory, Figure 2 depicts one possible process-oriented account of the interplay between marital conflict and parent-child relations in affecting children's adjustment. According to this model, the joint influence of destructive interparental conflict and poor parenting practices compromises children's abilities to preserve their

emotional security in the context of the interparental and parent-child subsystems through multiple pathways. Supporting these predictions, children's emotional security in the interparental and parent-child systems have been shown to mediate links between marital conflict and children's internalizing symptoms even after specifying the effects of the other pathway (Davies et al., 2001; Harold & Shelton, 2000).

Taking indirect models one step further in terms of the specification of process, it is postulated that the parenting disturbances associated with marital relations increase children's risk for maladjustment by compromising their emotional security in the parent-child relationship. In support of part of this pathway, recent studies have demonstrated that dimensions of parental emotional availability (e.g., warmth, sensitivity, support, hostility) partly mediate the link between marital conflict and child-parent attachment security (Frosch, Mangelsdorf, & McHale, 2000). On the other hand, as a byproduct of chronic experiences with marital discord, these children may be prone to developing insecure or insecure-disorganized attachment patterns with their parents. Owen and Cox (1997) reported that witnessing parents' frightening and frightened behavior during bouts of destructive interparental conflict compromised children's confidence in parents as sources of protection and support. Moreover, marital conflict has been shown to predict insecure and disorganized parent-child attachment relations even after statistically controlling for parental sensitivity and warmth (Frosch et al., 2000; Owen & Cox, 1997). Expanding these process models, recent research also supports another pathway whereby parenting disturbances that accompany destructive marital conflict compromised children's security in the parent-child relationship. Insecurity in the parent-child relationship, in turn, predicted children's psychological maladjustment even after specifying the effects of children's emotional security in the interparental relationship (Davies et al., 2001).

More research is warranted in this area, especially in light of the advances in distinguishing between parental gender and constructive and destructive dimensions of marital conflict and parenting from the child's perspective (e.g., Crockenberg & Forgays, 1996; Goeke-Morey et al., 2000; Frosch et al., 2000; Noller, Feeney, Sheehan, & Peterson, 2000; Paley, Conger, & Harold, 2000). Thus, incorporating the role of broader family systems (e.g., coparenting, siblings; Dunn & Davies, 2001; McHale & Cowan, 1996; Stocker & Youngblade, 1999), social learning (e.g., Davis et al., 1999; Emery, 1989), cognitive-contextual (e.g., Grych & Fincham, 1990; Grych, 1998), and additional emotional (e.g., Crockenberg & Langrock, 2001; Jenkins, 2000) processes will also be fruitful directions for future research. Systematically tracing the bidirectional and transactional interplay between child, parent, parent-child, and

interparental functioning will also be a key task in furthering a family-wide model of child adjustment (Cummings, Davies, & Campbell, 2000). For example, exposure to aversive child dispositions may tax parental resources, caregiving abilities, and the marital relationship (e.g., Lynch & Cicchetti, 1998; Shaw & Bell, 1993).

Relatedly, there is a need for more studies of multiple family influences on child development, investigating the interrelationships and relative contributions of different influences, including marital conflict. Thus, there has been a tendency in various directions in family research to focus on single influences on child development, such as maternal depression, particular aspects of parenting, alcoholism, and other family or family-related risk factors. There is a need for progress from the study of single influences towards more coordinated and holistic studies of family influences on children, supporting a move towards broader family-wide models of the processes that affect children's development (Cummings & Davies, 1996). For example, research on parenting, in particular, has often neglected assessment of marital functioning or has only assessed marital conflict at a global level of analysis. The present body of research strongly supports the inclusion of highly differentiated assessments of marital conflict in the investigation of multiple topics in family research towards more comprehensive understanding of the effects of family functioning on children (Cummings et al., 2000).

Child characteristics and background

Although research has established that marital conflict is a predictor of children's coping and adjustment difficulties, wide variation is evident in the outcomes reported in children exposed to high levels of interparental conflict and violence (Grych, Jouriles, Swank, MacDonald, & Norwood, 2000). Accordingly, another important direction in research is geared toward understanding how child characteristics and background might serve as sources of variability in the outcomes of children from high conflict homes (Cummings & Cummings, 1988). Thus, contextual factors beyond child characteristics may also importantly affect responding. Recent trends and future directions of research for the following domains of contextual factors are discussed below: (a) children's intrapersonal attributes, (b) familial characteristics, and (c) ecological contexts.

Children's characteristics

Organism-environment or diathesis-stress models have repeatedly stressed the significance of children's intrapersonal attributes as moderators of the impact of stressful events on adjustment (e.g.,

Wachs, 1991; Windle & Tubman, 1999). Accordingly, Cummings and Cummings (1988) and more recent theoretical frameworks (Davies & Cummings, 1994; Grych & Fincham, 1990) have advocated for identifying children's intrapersonal attributes that may serve to potentiate or protect children from the effects of marital conflict.

Age and developmental level. It is difficult to decipher whether children in any specific age group or developmental period are, in any broad sense, more vulnerable to interparental conflict than other age groups. For example, some research indicates that associations between marital discord and child adjustment are stronger for preschool children than older children (Mahoney, Jouriles, & Scavone, 1997), whereas other studies suggest that adolescence may be a period of vulnerability to marital difficulties (Sim & Vuchinich, 1996). Still other studies fail to find evidence for the moderating effects of age (Buehler, Anthony, Krishnakumar, & Stone, 1997; Gerard & Buehler, 1999; Johnston, Gonzalez, & Campbell, 1987).

Distinguishing between different forms of child maladjustment may help in specifying the moderating role of age. For example, whereas young children may express their distress in the form of externalizing difficulties (e.g., aggression, noncompliance, temper tantrums) in stressful interpersonal contexts (Glasberg & Aboud, 1981, 1982), as they grow older children may increasingly react to psychosocial adversity by exhibiting internalizing symptoms, dysphoria, and negative self-appraisals (Angold & Rutter, 1992; Jouriles, Spiller, Stephens, McDonald, & Swank, 2000).

Future advances in the study of age as a moderator would also benefit from greater consideration of relations between age and children's response processes. For example, preschool children from high conflict homes may be at greater risk for developing adjustment problems by virtue of their more fearful reactions to conflict (e.g., Cummings, Vogel, Cummings, & El-Sheikh, 1989; Davies et al., 1999), tendencies to blame themselves for adult problems, and appraisals of family disputes as a greater threat to the welfare of themselves and their families (Covell & Abramovitch, 1987; Jouriles et al., 2000). At the same time, relative to older children and adolescence, preschoolers' lower sensitivity to adult problems, briefer histories of exposure to interparental conflict, and weaker dispositions to mediate conflicts may serve as protective factors that offset this risk. As another example, Jouriles and colleagues (2000) reported that appraisals of self-blame were more powerful predictors of child internalizing symptoms for 10- to 12-year-old children than 8- to 9-year-old children. Thus, the goal for research probably should not be simply to search for the one age group that is most vulnerable to interparental conflict, but rather mapping the specific locus of the moderating

effects of age at different parts of multivariate, multi-chain process models of marital conflict.

Gender. It is difficult to draw any clear-cut, simple conclusions regarding the role of gender. Many studies have produced complex and inconsistent results, with large sample studies and meta-analyses failing to find support for moderating effects (e.g., Jouriles, Bourg, & Farris, 1991; Buehler et al., 1997). Gender may operate in different ways across different domains of children's functioning. Relatedly, girls and boys may evidence comparable levels of distress that are manifested in different ways (Davies & Lindsay, 2001). For example, girls may be more likely to exhibit distress (Cummings, Vogel, Cummings, & El-Sheikh, 1989; Davies et al., 1999; Grych, 1998), especially when distress is reflected in subtle, covert channels of expression (Cummings, Davies, & Campbell, 2000). Thus, despite a substantial body of research, many questions remain. A direction for future research is to delineate gender-specific pathways within models that integrate the study of children's modes of reactivity to conflict with indices of their global psychological adjustment (Davies & Lindsay, 2001).

Temperament and personality. Temperament has also been hypothesized to play a role in pathways between marital conflict and children's coping and adjustment (Davies & Cummings, 1994; Emery & Kitzmann, 1995; Grych & Fincham, 1990). For example, dimensions of difficult temperament have specifically been hypothesized to exacerbate the effects of marital conflict. Thus, Davies and Windle (in press) reported that dimensions of difficult temperament (i.e., poor task orientation, low persistence in activities) potentiated the risk marital discord posed to adolescents' trajectories of psychological adjustment.

However, little is known about the nature of temperament as a potentiating or protective factor in contexts of marital conflict. Another gap in research is the study of the role of personality and the interface between concepts of temperament and personality during development (Caspi, Elder, & Bem, 1987). Thus, systematically cataloguing the dimensions of temperament or personality that dilute or exacerbate the effects of marital discord is a task for future research. Expanding the search to other behavioral or personality dispositions (e.g., early behavior problems) is also important, especially given the intriguing relations reported between children's behavioral problems and their coping and adjustment in the context of adults' discord (e.g., Cummings et al., 1985; Davies & Windle, in press; Klaczynski & Cummings, 1989). For example, Fergusson et al. (1992) reported that interparental discord was a stronger predictor of delinquency for adolescents with histories of conduct problems than for adolescents without such histories. That is,

conduct problems in preadolescence moderated the link between exposure to interparental discord and young adolescent delinquency.

Children's family characteristics, background, and history

Individual differences in children's experiences within the larger family system may also help to explain the heterogeneity of children's outcomes in high conflict homes. Family characteristics may play key roles in both moderator models and mediational pathways of child adjustment. For the sake of brevity, a subset of characteristics of possible factors is considered here: parental symptomatology, sibling relations, and family-level characteristics.

Parental symptomatology. Indices of parental symptomatology, especially parental depressive symptoms, have been related to both marital conflict and children's maladjustment in past research. Extensive reviews of relations between maternal depression and child development are provided elsewhere (Cummings & Davies, 1994b; Goodman & Gotlib, 1999). For example, Davies, Dumenci, and Windle (1999) reported that maternal depressive symptoms mediated the effects of marital distress on the depressive symptoms of adolescents, whereas marital distress mediated the effects on adolescent externalizing symptoms of maternal depressive symptoms. However, despite the substantial research in this area, a host of plausible multivariate models await empirical testing (Davies & Windle, 1997; Downey & Coyne, 1990). Among the additional unanswered questions, the mediational role of marital conflict in predicting adjustment in children of depressed parents may be affected by the gender of the depressed parent (Cummings & Davies, 1994b) and how parental anger and conflict are expressed (Renk, Phares, & Epps, 1999).

Marital conflict may also be a mode through which parental alcohol problems affect children (El-Sheikh & Cummings, 1997; Windle & Davies, 1999). In comparison to children of non-alcoholic families (non-COAs), children of alcoholic parents (COAs) are exposed to higher levels of interparental conflict, violence, and emotional instability (Heyman, O'Leary, & Jouriles, 1995; Leonard & Senchak, 1993) which, in turn, may affect children's adjustment through emotional and cognitive channels. As an example that supports this point, El-Sheikh (in press) reported that children's emotional reactivity, such as anger, sadness, and fear, exacerbated the effects on children of parental drinking problems. Interestingly, with regard to these two forms of parental adjustment problems, El-Sheikh and Flanagan (in press) found that relations between father's and mother's drinking and children's adjustment problems were mediated by both marital conflict and maternal depression. Given relations between

parental drinking, marital conflict, and parental depression among adults (Beach, 2000), examination of the cumulative impact of these particular stressors on children's functioning is an especially intriguing direction for further investigation.

Mechanisms of modeling, acquisition of behavioral scripts, and negative reinforcement may each contribute to pathways between marital conflict and child adjustment in depressed (Cummings & Davies, 1994b; Davis et al., 1998) and alcoholic (Andrews, Hops, & Duncan, 1997) families. It is also plausible that children's stakes in interparental conflict differ depending on the adjustment of parents. Thus, moderator models also merit consideration. For example, children of parents with alcohol problems were found to be more emotionally reactive to marital conflict than children of parents without alcohol problems (Ballard & Cummings, 1990). Thus, adjustment problems of parents may heighten children's sensitivity to interparental conflict. Alternatively, it might be hypothesized that parental adjustment problems along with the larger constellation of associated stressors may override or dilute the effects of interparental conflict.

Sibling relations. Little is known about the joint influence of parental conflict and sibling relationship quality on children's adjustment, but the available evidence supports sibling relationships as also factoring in the effects of interparental conflict. Contemporaneous and prospective relations between marital conflict and greater sibling conflict, rivalry, and poor relationship quality are reported (Brody, Stoneman, & Burke, 1987; Brody, Stoneman, & McCoy, 1992; Stocker & Youngblade, 1999). Furthermore, although caution must be exercised in drawing conclusions about directionality, sibling relationship quality has been shown to predict children's psychosocial adjustment (see review by Brody, 1998). Thus, fruitful empirical directions may involve testing the mediational role of sibling relations and mapping the family (e.g., differential parental treatment, parental hostility) and child (e.g., self-blame) processes accounting for why interparental conflict may compromise sibling relations (see Deal, 1996; Dunn & Davies, 2001; McGuire, Dunn, & Plomin, 1995; Stocker & Youngblade, 1999).

On the other hand, siblings may also play a constructive role in children's coping with parental conflict. Jenkins and colleagues (1989) found that seeking contact with a sibling was a commonly used strategy for children coping with marital conflict. Cummings and Smith (1993) reported that positive affect increased among female siblings during exposure to conflict involving the mother. Siblings may help to shield children from the risk posed by marital conflict. Research testing moderators have been promising. For example, Jenkins and Smith (1990) found that the association between marital conflict and child symptomatology was significantly

weaker in magnitude for children with good sibling relations than when children had poor sibling relations. Even the mere presence of a sibling may buffer children from the effects of parental divorce and family stress (Kempton, Armistead, Wierson, & Forehand, 1991; Sandler, 1980). However, in more systematically articulating the parameters of sibling relationships that moderate the effects of interparental conflict, researchers must be careful not to simply assume that siblings will uniformly serve as buffers. For example, Nixon and Cummings (1999) found that children with disabled siblings reported more sadness, fear, anger, personal responsibility, and dispositions to intervene in family conflicts than children without disabled siblings. This research raises several unaddressed questions: Does being the recipient of protection and nurturance from the sibling largely explain why good sibling relations buffer children from marital conflict? Do children also incur benefits or, alternatively, psychological burdens from being the provider of nurturance?

Family-level characteristics. Advances in the study of family-level (e.g., conflict, instability, cohesion, expressiveness, support; Ackerman, Izard, Schoff, Youngstrom, & Kogos, 1999; Dickstein et al., 1998) and triadic (e.g., Gable, Belsky, & Crnic, 1995; McHale & Rasmussen, 1998) systems also provide fruitful opportunities to embed the examination of the effects of marital conflict within the family system. For example, marital anger could sometimes reflect a larger family tendency to express both positive and negative emotion (i.e., family expressiveness), a pattern that has been associated with social competence in children (Cassidy, Parke, Butkovsky, & Braungart, 1992). Expressions of negative and positive affect may elicit family discussions and explanations about the nature, causes, and constructive consequences of emotion that, in turn, foster children's increased socioemotional understanding (Dunn, Brown, & Beardsall, 1991). Perceptions of family support may protect adolescents from the adverse effects of marital discord (Davies & Windle, in press). Further delineating how interparental conflict may have different meanings and implications across multiple family-level characteristics (e.g., instability) will likely be an important step for future research and theory (Bradley & Corwyn, 2000).

Cultural and other ecological contexts

Larger ecological contexts in the form of culture, extended kin networks, neighborhood quality, school climate, exposure to media, and friendship and peer relations may alter the nature and magnitude of pathways between marital conflict and child adjustment. As Parke (1998) has noted, 'the field of family psychology is increasingly recognized as contextualized and embedded in a set of complex

extended family, neighborhood, institutional, and cultural systems' (p. 4) and 'one of the major challenges over the next decade is to better understand the interplay between family and other social systems' (p. 4). For the sake of brevity, we will limit consideration to the following topics: culture, peer relations, and community relations.

Culture. Little is known about interrelations between marital conflict and children's coping and adjustment beyond white, middle class US samples (Depner, Leino, & Chun, 1992; Gonzalez et al., 2000). Understanding of the pervasiveness of these relations for families of diverse cultural and ethnic groups is limited by the fact that most research has been based upon children and families from white, English-speaking US samples, or other English-speaking cultures (e.g., British samples, Rutter & Quinton, 1984). Put another way, the effects of marital functioning on children have rarely been considered for families from non-English-speaking cultures, especially for cultures from outside of Europe and North America (Parke & Buriel, 1998).

The study of effects associated with ethnicity, a proxy for various cultural and community differences, provides an avenue for understanding the specificity and universality of process relations between marital conflict and child adjustment. For example, McLoyd, Harper, and Copeland (2001) have hypothesized that Hispanic and African American children may be less susceptible to interparental conflict because extended family networks increase children's access to sources of support and cultural norms serve to limit the proliferation of anger into the broader family system. Initial research of relevance to this hypothesis has yielded mixed support. On the one hand, support for ethnic specificity in spillover of family stress is evidenced by stronger associations between family stress and family conflict in Caucasian families than in Hispanic families (Barrera, Li, & Chassin, 1995). On the other hand, tests of parenting-as-mediator models of marital conflict are remarkably similar across studies that have independently utilized samples of predominantly Caucasian, middle class samples and samples of multi-ethnic, low-income families (Fauber et al., 1990; Gonzalez et al., 2000; Lindahl & Malik, 1999), thereby failing to support the hypothesis that ethnicity may protect children from the effects of marital conflict. As another example, Tschann, Flores, Pasch, and Marin (1999) reported many similarities, with few differences, between Mexican American and European American families in the pattern of relations between dimensions of interparental conflict and children's adjustment. Moreover, effects of forms of marital conflict have been found to be similar in children from Chilean and American Caucasian families, with children from Chilean families even slightly more affected by marital conflict and marital conflict resolution (Cummings, Wilson, & Shamir, 2001).

The paucity of research on Spanish-speaking, Latin American families is one notable gap in this regard. Although most Latin American countries are viewed as middle-income nations, understanding and advancement of child well-being and health matters do not currently compare favorably with the United States and Europe (Bartell & O'Donnell, 2001). There is increasing focus on advancing productive human development, and attention to the rights and well-being of children, including the growth of the child as a function of influences with the family (Bartell, 2001). For example, parental and neighborhood behavior and child-rearing practices are among the factors identified as possibly contributing to relatively high rates of violence among Latin American children, adolescents and young adults (Guerrero, 2001; Yunes & Zubarew, 2001). Nonetheless, little social science research has been systematically directed towards understanding the marital and family processes that might contribute to children's well-being and risk for adjustment problems, including aggressiveness. Moreover, small sample sizes and other methodological factors (e.g., questionable or inadequate comparison groups) limit the conclusions that can be drawn from the extant research.

Peer relations. Linkages are found between exposure to marital conflict and poor peer relations (e.g., Gottman & Katz, 1989; MacKinnon-Lewis & Lofquist, 1996; Parke et al., 2001; Stocker & Youngblade, 1999; Strassberg, Dodge, Bates, & Pettit, 1992). Consistent with the aims of process models, researchers are currently tackling the task of delineating the family (e.g., parent-child hostility) and intrachild (e.g., self-blame, perceived threat) mechanisms that mediate associations between marital conflict and children's peer relations (e.g., Stocker & Youngblade, 1999).

At a broader level of developmental process, researchers are facing the challenge of understanding the interplay between peer relations and marital conflict in the larger context of children's developmental outcomes. Thus, interparental conflict may be a causal agent responsible for the early development of some forms of maladjustment, whereas peer relations may be largely responsible for the developmental course (i.e., maintenance, escalation) of problems thereafter (Fincham, Grych, & Osborne, 1994; Rutter, 1994). Consistent with this notion, MacKinnon-Lewis and Lofquist (1996) found that increases in marital conflict predicted boys' earlier depression. Higher levels of depression, in turn, were indirectly related to boys' aggressive behavior with peers 18 months later through its association with poor social standing with peers.

Complementary conceptualizations have stressed that peer and friendship quality may buffer children from the deleterious effects of interparental conflict (Wasserstein & La Greca, 1996). Some studies do support the hypothesis that peer support and

availability protect children from the deleterious effects of marital conflict (Rogers & Holmbeck, 1997; Wasserstein & La Greca, 1996), whereas other studies have failed to find any moderating effects (Jenkins & Smith, 1990). Progress in this area will require specification of models that are sensitive to the multidimensional nature of peer relations and the underlying mechanisms that account for the effects on children.

Community relations and activities. Jenkins and Smith (1990) hypothesized that children facing high levels of marital conflict may be protected by other community relations and activities such as involvement in hobbies, positive recognition for school or extracurricular activities, and the presence of close relations with an adult outside the family (e.g., grandparent, teacher). On the other hand, Schwartz and Proctor (2000) found that community violence exposure was linked with children's behavioral and social maladjustment, and, moreover, that negative social outcomes due to violent victimization were mediated by emotion dysregulation. While initial empirical forays have yielded some support for the conceptualization of community dimensions as moderators (Jenkins & Smith, 1990), research has yet to empirically test the myriad of community factors (e.g., neighborhood and school characteristics) that may potentiate or protect children from high conflict homes.

In conclusion, cataloging the moderating effects of contextual factors will not be enough in the near future. Process-oriented models also stipulate that progress in understanding the moderating effects must be supplemented with searches for 'why' contextual factors alter the magnitude and nature of associations between marital conflict and child development (Cummings, Davies, & Campbell, 2000). That is, moderator models must eventually address the mediator question of why children possessing certain characteristics or experiencing certain conditions are more vulnerable to discord (Rutter, 1983; Rutter & Pickles, 1991). For example, Davies and Lindsay (2001; Lindsay & Davies, 2001) proposed that girls would exhibit greater vulnerability to interparental conflict than boys during early adolescence. However, simply ending inquiry at the conclusion that gender is a moderator of marital conflict is inherently unsatisfying without an understanding of why. Thus, guided by the gender intensification hypothesis (Hill & Lynch, 1983), it was further hypothesized that girls may be a greater risk because they are increasingly socialized to develop a greater proclivity toward communion or sensitivity and concern, especially in the context of close relationships. In support of this model, Lindsay and Davies (2001) found that girls' greater interpersonal concern accounted for their greater vulnerability to interparental conflict. As evidence of moderating effects of various intrapersonal, familial,

and ecological characteristics continue to accumulate, the next step in process models is for researchers to specify more complex blends of moderator and mediator models (Baron & Kenny, 1986; Holmbeck, 1997).

Time

Understanding of the effects of marital conflict on children at the level of developmental process was very limited at the time of publication of the Cummings and Cummings (1988) report and remains a gap in a process-oriented conceptualization of these influences on children's development. Marital conflict predicts children's adjustment over time, in some instances mediating the effects of other family stressors (e.g., maternal depression; Caplan et al., 1989; Davies & Windle, 1997; Murray, Sinclair, Cooper, Ducournau, & Turner, 1999), and findings have also accumulated for the stability in psychological processes of responding to marital conflict over time (e.g., emotional reactivity), and for after-effects on children's social functioning (e.g., increased aggressiveness towards peers) (e.g., see review in Cummings & Davies, 1994a). However, the aim of process-oriented research is not simply to show that marital conflict predicts later adjustment or to document correlations or partial correlations in processes of responding over time. Rather, the goal can be described as identifying the dynamic patterns of intra- and extra-organismic causal processes that underlie pathways of development in particular socioemotional contexts over time. Thus, as depicted in Figure 1, one needs to know how classes of stress and coping processes, and child characteristics and family background factors, dynamically mediate and/or moderate relations between particular contexts and stimulus characteristics of marital relationships and children's developmental outcomes.

As we have noted elsewhere, prospective longitudinal research is the most urgent requirement for greater understanding of time-related effects (see also Fincham & Grych, 2001; Margolin, Oliver, & Medina, 2001). While relatively few longitudinal studies on the effects of marital conflict have been conducted, particularly with adequate assessment of mediators and moderators, to advance process-oriented understanding, conduct of prospective longitudinal research in the future is absolutely essential to addressing many of the questions of greatest concern to process-oriented accounts of the effects of marital conflict on children. Initial progress in testing models of mediating processes in the context of longitudinal research designs has been made (Harold, Shelton, Goeke-Morey, & Cummings, 2001). Identifying the temporal ordering between variables in the context of longitudinal research designs gives a much better indication of the causal relations between variables than simply showing that the

variables may co-vary, as in cross-sectional research.

Charting pathways of development, including the form, direction, and shape of developmental pathways can only be identified with cogency by means of the collection of repeated measurements over time. That is, the pattern of continuity or change in development can only be demonstrated by assessing the functioning of individuals on multiple occasions over a period of time and tracking how individuals change, or remain the same, over that period. Relatedly, longitudinal research is needed to advance understanding of more sophisticated levels of process-oriented explanation, including description of intra-individual as well as inter-individual change, and the magnitude and patterns of change (Davies & Windle, in press).

Care must also be taken, however, in the conduct of longitudinal research to ensure sufficient payoff for the cost. For both statistical and substantive reasons, the number of data points sampled over time must be sufficient for statistical modeling purposes, and a sufficiently broad, and conceptually and methodologically rigorous, assessment of predictors, mediators, moderators, and outcomes needs to be accomplished. That is, one must ensure at the outset that the results yielded by the research design promise to be sufficiently informative. Simply showing that two variables are related over a period of time, even a substantial period of time, may provide limited clues about pathways of development unless various conditions of research design are accomplished.

Another issue to ensure contribution towards advanced process-level understanding is to test whether change in a dimension of interest (e.g., marital conflict) predicts *change* in adjustment, rather than adjustment in an absolute sense (Fincham et al., 1994). For example, suppose one found that change in marital conflict at 5 years of age predicted children's adjustment problems at age 10. Such a finding would certainly be interesting, but one would not know whether marital conflict was responsible for children's adjustment problems at age 10. The most cogent case would be made if adjustment and marital conflict were collected at both ages, and changes in marital conflict and changes in adjustment were shown to *vary systematically* between ages 5 and 10 (see Cummings, Davies, & Campbell, 2000, for more extensive discussion of this issue and other matters pertaining to the consideration of time-related factors in process-oriented models).

Outcomes

The bottom line for many with regard to this literature is the compelling evidence that marital conflict predicts or is correlated with children's

adjustment outcomes. A brief listing of some of the reviews and other reports documenting this link with children's outcomes was provided at the outset of this paper. However, the matter of how to consider children's outcomes from a process-oriented perspective is not so simple an issue as it may appear at first glance. Below we consider some of the most significant themes that have emerged, or are emerging, for this element of a process-oriented model (see Figure 1).

Children's internalizing and externalizing disorders

Traditionally, research on the effects of marital discord on children has been concerned with links with externalizing disorders (e.g., conduct problems) (Emery, 1982). Cummings and Cummings (1988) called attention to the significance of also examining links with internalizing problems (e.g., anxiety, depression), suggesting that such problems may have been underreported due to their lesser salience to those typically rating the children (e.g., parents, teachers), and, moreover, may be the predominant response of children to exposure to marital conflict. As they put it, 'Exposure to background anger may have its greatest impact by increasing children's level of experienced distress and arousal' (p. 314). With the advent of assessments more sensitive to dimensions of children's functioning, evidence supporting links with children's internalizing problems has indeed increased. In fact, recent research, including those studies with particularly rigorous, multi-method assessments, now report more pervasive links between exposure to marital conflict and children's internalizing problems than between marital conflict and externalizing problems (Davies & Cummings, 1998; Harold et al., 1997). Moreover, one study focusing on appraisal processes (i.e., self-blame; threat) mediating effects of exposure to marital conflict and violence on children's adjustment *only* found links with children's internalizing problems (Grych, Fincham, Jouriles, & McDonald, 2000; see also Harold et al., 1997, Study 2). While there seems little doubt that links with externalizing problems may occur due to the dysregulating and arousing effects of exposure to marital conflict (Cummings et al., 1985; Klaczynski & Cummings, 1989; see Davies & Cummings, 1998), an intriguing notion is that effects on internalizing problems are primarily due to exposure to marital conflict whereas effects on externalizing disorders are predominately mediated by an indirect pathway resulting from changes in parenting practices. Moreover, one recent study based on a large sample of children and families in the United Kingdom reported evidence for just such a pattern of findings (Harold & Shelton, 2000). These results indicate the importance for future research to include adequate assessments of both direct and indirect pathways in order to further explore these intriguing patterns of findings regarding the

causal pathways for the prediction of externalizing and internalizing disorders in the children.

A process-oriented perspective on outcomes

Another significant notion regarding outcomes from a process-oriented perspective is that coping processes, rather than clinical diagnoses or ratings of children on clinical instruments, are ultimately at the heart of understanding the effects of marital conflict on children. Thus, Cummings and Cummings (1988) called attention to identifying the adaptive or maladaptive coping responses, and the contexts for their development, as the eventual goal for research, with clinical outcomes seen as a product of a gradual altering over time of children's coping strategies and styles.

Research and theory over the past decade, particularly from the developmental psychopathology tradition, has provided further development and foundation for this perspective on children's outcomes. For the developmental psychopathologist a disorder is not something that one 'has', that is, a pathogenic entity. Descriptive, symptom-based classification systems may tacitly fail to acknowledge the complex nature of the individual's adaptations and transactions within their environments that underlie symptomatology, leaving major gaps with regard to understanding of the processes that characterize the development of psychopathology. Consequently, such static models of child outcomes have inherent limitations with regard to their adequacy for the full articulation of explanatory models.

Alternatively, there is a movement within the developmental psychopathology tradition to conceptualize psychopathology as 'developmental deviation', that is, disorder is defined in relation to nondisordered development rather than as a pathogenic entity. Moreover, disorder is seen as ultimately reflecting processes of functioning that, while deviant in terms of particular socioemotional or developmental contexts at a particular time, are inherently dynamic and subject to change over time. Thus, Sroufe (1997, p. 251) has stated that maladaptation is 'not something a person "has" (but) the complex result of a myriad of risk and protective factors operating over time.' It follows that for both scientific and treatment goals the primary interest is in understanding the processes that underlie disorder and their developmental trajectory over time. In fact, differential diagnosis *per se* can be seen to be of secondary interest since it is somewhat removed from the level of analysis needed to truly understand disorder (see Cummings, Davies, & Campbell, 2000).

The practical implication of this perspective for the researcher in the area of marital conflict and child development is *not* to discard clinical assessment, since such assessments are very valuable to summarize and convey information about the level and extent of problems associated with family contexts.

Rather, the point is to call attention to the fact that understanding of processes of functioning is the ultimate goal for research, and that these processes have primary rather than secondary status for explanatory or descriptive accounts of the impact of marital conflict on children.

Positive and negative outcomes

The traditional focus in the study of marital conflict and discord has been on the negative effects on children. However, as we have seen, some forms of marital conflict behavior may reduce children's distress or even have positive effects on their emotional and social functioning (e.g., Goeke-Morey et al., 2000; also see Fincham & Grych, 2001). Moreover, children may learn valuable lessons about handling their own disputes from watching constructive marital conflicts. Furthermore, in articulating a process-oriented model for the factors that affect children's development it is important that the model encompass both positive (e.g., protective) and negative (e.g., risk) influences on development and a complex interplay between these influences. By contrast, in the classical medical model, disorders are seen as discrete and as arising from singular or particular endogenous pathogens (Sroufe, 1997). Thus, a broad causal net should be cast in order to explain disorder, resilience, or positive outcomes. Given its concern with both the positive and negative sides of human development, and the entire spectrum of outcomes and pathways from the normal to the extremely psychopathological, the developmental psychopathology approach provides a useful foundation for advancing these more sophisticated perspectives on child outcomes in future research (for further discussion, see Cummings, Davies, & Campbell, 2000; Margolin et al., 2001).

Updated framework for a process-oriented approach

Based on this review, reflecting the past decade or so of research, a revised model for a process-oriented approach on the effects of marital discord on children can be proposed. This framework is shown in Figure 3. Notably, a distinction is made between constructive and destructive marital relations, replacing specific categories of responding in the Cummings and Cummings model with a higher-order qualitative distinction between types of marital conflict from the children's perspective. However, at the same time, it should be noted that many specific marital behaviors and emotions may be pertinent here, as we have shown.

Marital relations are portrayed as having direct effects on children's psychological functioning, but also indirect effects mediated by effects on parenting (i.e., parenting practices, parent-child attachment),

reflecting the increased emphasis on the effects of marital conflict on parenting in research in recent years. Notably, while parent-child factors receive primary consideration in the present model and text as mediational pathways, consistent with the message of the bulk of research and theory on this topic, these factors may also moderate effects in a process-oriented account of the impact on children. For example, support and safety afforded by good parent-child relationships have been hypothesized to buffer children from the effects of interparental conflict (Emery, 1982). However, the lack of research on parenting as moderators hinders definitive conclusions about whether dimensions of parent-child relations act as protective factors. Moreover, some important tests for such effects have reported no evidence in support of moderator models (e.g., Erel & Burman, 1995). On the other hand, there is some suggestion in the literature that highly aversive dimensions of parenting may moderate, that is, increase, negative effects. For example, abused children have been reported to be more sensitive to marital conflict (Hennessy, Rabideau, Cicchetti, & Cummings, 1994). These matters regarding parenting as moderators of process-oriented effects merit much more study in future research.

Consistent with Cummings and Cummings, processes of children's day-to-day psychological functioning (i.e., emotional, social, behavioral, cognitive, physiological reactions) are again hypothesized as mediating children's adjustment. As we have seen, a considerable literature has now developed to support the role of such processes in children's functioning, so that the pertinence of these elements to a process-oriented account of the effects of marital conflict on children is now more than a speculative proposition based on a relative handful of studies. Less is known about the role of children's psychological functioning conceptualized as coping strategies or higher-order coping styles, but these directions for the study of mediating processes also appear promising, as we have seen.

With regard to conceptually well-articulated classes of mediating processes affecting psychological adjustment, children's sense of emotional security has surely been established as a significant class of conceptually well-articulated psychological processes likely to be affected by marital conflict, either directly due to exposure to marital conflict or indirectly due to the effects of marital conflict on parenting practices. There is also no doubt that children's emotional security has implications for children's adjustment (Cummings & Davies, 1996; Davies & Cummings, 1994; Harold & Shelton, 2000). Much more work is needed towards establishing whether other classes of psychological processes can be well defined theoretically as well as adequately supported by empirical research as mediating effects on children (e.g., modeling-related processes).

There has also been a considerable growth since 1988 in the study of moderating factors, although understanding of the effects of some moderators (e.g., age, gender) remains very limited despite a now substantial body of research. As we have seen, moderator variables that have been implicated in research include family context (e.g., parental depressive symptoms, parental alcohol problems, family-level characteristics, sibling relations and other group factors), child characteristics (e.g., histories of exposure to marital conflict, age, gender, personality or temperament), and extra-familial contexts (e.g., peer relations, community, cultural contexts). However, much more work needs to be done to outline the purview and domain of moderating variables, and, more significantly, how these factors are implicated in children's functioning over time in contexts of marital and family functioning. At this time family factors other than parenting appear to be more pertinent to consider as moderators than as mediators but there is relatively little basis for making definitive conclusions about this matter at this time. Thus, these variables are shown or grouped together as possible mediators as well as possible moderators in different points of the figure. One clear message of research on the topic of moderators is that research designs for studying the effects on children of marital conflict need to include assessments of a relatively broad array of individual, familial, and extra-family factors in order to be able to provide a well-articulated account of pathways of causal influences.

The relevance of pathways of development is signified by the notation of 'development over time' in the figure. That is, the effects of marital conflict on children are not static but reflect the dynamic interplay of influences over time. As we have noted, relatively little is known about time as a factor in the emergence of children's patterns of adaptation or maladaptation during development. Thus, there is a great need for prospective longitudinal research on this topic but, at the same time, a requirement for sophistication in research design and statistical approach for these directions (see Cummings, Davies, & Campbell, 2000).

Finally, we have seen that the study of children's outcomes is also not an entirely straightforward matter. While this was anticipated in Cummings and Cummings (1988), theory and research in the years since the publication of that report, especially from the developmental psychopathology tradition, have served to underscore and articulate the importance of a focus on processes of adaptation and maladaptation and social competence for a fully articulated process-oriented model of the effects of marital conflict on children's outcomes. Future research should remain open to the possibilities that marital conflict may be associated with processes that result in either increasing vulnerability or increasing competence, with the latter

possibility an outcome to consider carefully for children from homes characterized by typically constructive marital conflicts. It remains that the domain of the positive effects of constructive marital conflicts is little investigated.

The framework in Figure 3 thus places special emphasis on studying specific contexts of exposure to marital conflict and the effects of marital conflict on the family as well as the child, individual differences between children in their reactions to marital conflict, and the multidimensional nature of coping processes. The intent of the figure is to provide a 'big picture' perspective on what needs to be done to more fully understand the effects of marital conflict on children's development. Recent findings in the literature on marital relations and child development have served to underscore the need for a family-wide perspective on influences on children's development in families, rather than a focus on any one family system, such as the parent-child system. Fruitful study of the effects of marital conflict on children requires an adequately comprehensive study of family influences. At the same time, the message of this body of work is that the study of other family processes (e.g., parenting) ought to consider or take into account the functioning (or dysfunction) of adult relationships that potentially impact the children, and do so at a level of sophistication that does justice to the operating processes (e.g., aim to assess dimensions of both constructive and destructive conflicts).

The model thus provides a basis for conceptualizing multiple pathways of effect associated with marital conflict. Emphasis is placed on dynamic processes of interaction between multiple intra- and extra-organismic factors, as contrasted with traditional, relatively static notions of associations between relatively global characterizations of marital discord and child outcomes. The study of process is assumed to require the examination of multiple domains and responses (e.g., cognitive, emotional, physiological) and also how effects emerge over time. Nonetheless, even this relatively complex model may not account for all possible pathways of effect. Thus, another goal for future research must be to explore new questions, issues, and possible influences or factors that may impact on the children.

Conclusion

The past decade or so has witnessed exciting new developments and much progress in understanding relations between marital conflict and children's development. The further proposal, development, and testing of theoretical models to encompass and articulate the complex patterns of effects and processes should be a particular goal for the future. Another key direction is the movement towards the

inclusion of more sophisticated assessments of mediating processes and intra-individual, family-wide, and extra-familial factors in research designs. Cross-cultural and multi-ethnic studies of effects are particularly needed. With these goals in mind, and the other various future directions noted elsewhere as additional aims, there is every reason to believe that the next 10 years will witness as much, or more, progress in understanding.

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