

## Does Marital Conflict Cause Child Maladjustment? Directions and Challenges for Longitudinal Research

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Although the association between marital conflict and child adjustment problems has been well documented, there is no empirical evidence that conflict actually causes maladjustment. The investigation of causation requires theoretically and empirically informed longitudinal research. Two topics are addressed to facilitate such research. First, how marital conflict may lead to adjustment problems is outlined, with a focus on constructs that are likely to be critical to any theory on this topic. Second, several issues are identified that need to be addressed in longitudinal research on the mechanisms underlying the link between marital and child problems.

Important advances have been made in the understanding of children's immediate reactions to conflict between adults and of the association between interparental conflict and children's overall adjustment (Emery, 1988). However, even though numerous studies have documented the impact of exposure to interadult conflict on children's immediate emotional and coping responses (e.g., Cummings, Ballard, El-Sheikh, & Lake, 1991; Grych & Fincham, 1993; O'Brien, Margolin, John, & Krueger, 1991), researchers do not know whether interparental conflict actually causes adjustment problems. As experiments are not a feasible means of addressing this question, prospective correlational studies provide the most promising avenue for the study of the mechanisms that link interparental conflict and child adjustment.

Before launching longitudinal investigations, however, it is important for investigators to address a simple yet fundamental question: Is

inquiry on the association between interparental conflict and child adjustment ready for longitudinal research? This question may strike one as unusual, but as Baldwin (1960) cautions, "A longitudinal study is the last, not the first, step in a research program" (p. 27). Baldwin went on to note that longitudinal research is essential for the study of psychological change but should be avoided whenever possible. This type of research involves a significant investment of time and resources and to be profitable requires a firm theoretical or empirical foundation that outlines expected causal relations among variables.

An examination of the growing, but still small, body of research on marital conflict and child adjustment raises important questions about the empirical foundation of this area of research. Three recent reviews summarizing studies of the association between marital and child problems concluded that the relation is consistent but not large (Jouriles, Farris, & McDonald, 1991; Lepner, Leino, & Chun, 1991; Reid & Crisafulli, 1990). For example, Jouriles et al. (1991), using 481 correlations from 26 studies on marital discord and child behavior problems, found that 370 of the correlations (77%) were less than .30 and that 446 of the correlations (97%) were below .50. Most data, therefore, have shown that marital discord and child adjustment share less than 10% of their variance. However, the studies reviewed operationalized marital discord in various ways, ranging from overall marital quality to overt conflict, thus obscuring the strength of the re-

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relationship between marital conflict per se and child problems.<sup>1</sup>

Moreover, most existing research simply documents the existence of a concurrent association between marital and child problems; only a few researchers have proposed and tested hypotheses about the processes linking marital conflict and child adjustment (for exceptions, see Fauber, Forehand, Thomas, & Wierson, 1990; Gottman & Katz, 1989). Although the articulation of how conflict and child problems are related is a necessary step before investigators launch longitudinal research, conceptual work in this area has lagged behind empirical research, and consequently our understanding of the mechanisms by which marital conflict may cause behavioral or emotional problems in children is very limited. We believe that the success of longitudinal research rests on greater theoretical development, and it may be that the very cost of such research will force greater specification of the processes by which conflict and child adjustment are related.

Our goal in this article is to facilitate the emergence of longitudinal research on marital conflict and child adjustment. We pursue this goal in two ways. First, we outline elements we believe to be critical for any theory of how marital conflict affects children. Second, we identify several issues that need to be addressed in longitudinal research designed to examine such theory.

### Toward a Theory of the Effect of Marital Conflict on Children

Two questions have guided our efforts to understand the link between marital and child problems. First, what exactly is it about marital conflict that is related to child outcomes? Conflict occurs in almost all marriages, yet most children do not develop adjustment difficulties. Therefore, it is important for investigators to identify and relate specific dimensions of conflict to child outcomes. Second, under what conditions do such relations occur? Marital conflict is only one part of a complex and multifaceted family system, and its impact will be shaped by this larger context. To understand the impact of conflict on children, therefore, it is important to specify how it is related to other aspects of family functioning that also affect children.

### *What Aspects of Conflict Are Related to Child Adjustment?*

The first question led us to focus on marital conflict that children witness personally. Unlike Fauber and Long (1991), who have argued that all conflict effects are mediated by parenting practices, we believe that clear, direct effects have been demonstrated (cf. Emery, Fincham, & Cummings, 1992), and our theoretical position flows from this perspective. An increasing number of studies have shown that conflict between adults is upsetting to children and that repeated exposure to parental disagreements is likely to be stressful (e.g., Cummings et al., 1991; Cummings, Vogel, Cummings, & El-Sheikh, 1989; Cummings, Zahn-Waxler, & Radke-Yarrow, 1981). Thus, conceptualizing marital conflict as a stressor provides a promising approach for an understanding of how conflict can have direct effects on children. However, it is not the fact that disagreements exist, or even how often they occur, but how these disagreements are handled that is likely to be most important. Thus, a more specific focus on how conflict is expressed is required.

We have argued that frequent marital conflict that is intense, poorly resolved, and child-related has adverse effects on children, whereas conflicts that do not concern children and are resolved constructively and nonaggressively—even if they occur frequently—do not (Grych & Fincham, 1990). Research on children's immediate response to conflict between adults supports this hypothesis. Conflict that involves verbal aggression (e.g., Cummings et al., 1989; Grych & Fincham, 1993), incomplete resolution (Cummings et al., 1989, 1991), and child-related content (Grych & Fincham, 1993) is more emotionally upsetting and perceived as more threatening by children. In contrast, nonaggressive conflicts that are fully resolved elicit no greater distress than do nonconflictual discussions (Cummings et al., 1991; Cummings,

<sup>1</sup> To increase the specificity of the constructs involved, we use the term *marital conflict* to refer only to disagreements that are overt, and thus potentially observable by the child, and to distinguish *conflict* from the terms *dissatisfaction*, *strain*, or *discord*, which refer to the existence of marital disharmony that may or may not be reflected in overt conflict behavior.

Simpson, & Wilson, 1993). In fact, the negative impact of conflict appears to be reduced if children simply are told that a conflict has been resolved (Cummings et al., 1993).

Even though exposure to marital conflict can be stressful, it alone (except, perhaps, in its most extreme forms) is not likely to be sufficient for an understanding of how it affects children. Children actively interpret and respond to their environment, and closer attention to their cognitive, emotional, and behavioral responses to conflict is critical for the development of theory concerning marital conflict's link to child adjustment. We believe that children's appraisal of conflict, or evaluation of its significance for their well-being, plays an important role in shaping the meaning and impact of particular episodes of marital conflict. The appraisal process, which involves both cognition and affect, guides behavior (see Lazarus, 1991; Lazarus & Folkman, 1984) and may have both short- and long-term consequences for children.

The role of children's perceptions in mediating the effects of stressful events has been highlighted by other theorists (e.g., Compas, 1987; Rutter, 1983) and is beginning to be addressed in research on marital conflict. Analogue studies have shown that children differ in how they perceive standardized conflicts and that these perceptions are linked to their emotional reactions and ideas about how to respond to the conflict (Cummings, Davies, & Simpson, 1994; Grych & Fincham, 1993; O'Brien et al., 1991). Therefore, siblings exposed to the same interparental conflict may respond quite differently because of their appraisals. For example, one child may not even perceive sarcasm between parents as reflective of conflict, whereas the other may be quite upset by it.

Although there are individual differences in children's cognitive and emotional responses to conflict, certain types of conflict appear to elicit certain types of appraisals. Recently, Grych and Fincham (1993) reported that verbal aggression and hostility increases children's negative affect, self-blame, expectation that the conflict will escalate, and belief that it will involve them. Conflicts in which the content was child-related led to greater shame, self-blame, and the belief that the child could help resolve the conflict. Grych and Fincham (1993) also hypothesized that intense conflicts may threaten chil-

dren's sense of safety and raise a number of fears, including divorce, and that child-related conflicts can lead to self-derogating cognitions and greater involvement of children in their parents' arguments. The role of appraisals was underscored in the finding that parents' provision of explanations that absolved children of fault for a conflict reduced children's self-blame and desire to intervene. Children's cognitive development as well as the psychological context in which the conflict occurs (e.g., emotional expressiveness of the family) is proposed to influence appraisals (Grych & Fincham, 1990). For example, younger children may be more likely to blame themselves for parental disagreements.

The findings regarding children's responses to specific episodes of conflict suggest that an understanding of the impact of conflict on their overall adjustment requires the measurement of specific dimensions of conflict from the child's point of view. Consequently, Grych, Seid, and Fincham (1992) developed an instrument (the Children's Perception of Interparental Conflict Scale; CPIC) to assess children's perceptions of several aspects of marital conflict, including both perceived properties of the conflict (e.g., intensity) and children's subjective response to conflict (e.g., perceived threat). We have found that school-age children can report reliably on their perceptions of conflict; in fact, stability coefficients on the measure over a 12-month period (.64, .51, and .47 for the three CPIC subscales; Fincham, Grych, & Osborne, 1993) were as impressive as those obtained for well-established measures, such as the Children's Depression Inventory (.38; Kovacs, 1981) and the Revised Children's Manifest Anxiety Scale (.52; Reynolds & Richmond, 1978). Furthermore, children's reports of the frequency, intensity, and resolution of conflict were consistently related to ratings of adjustment made by parents, children, and the children's teachers and peers. In contrast, parental reports of conflict correlated only with parental reports of adjustment (Grych et al., 1992; see also Cummings et al., 1994).

More important for an understanding of the possible effects of marital conflict on children, we recently found that boys' reports of marital conflict predicted indexes of adjustment 1 year later (Fincham, Grych, & Osborne, 1993). Specifically, increases in the level of frequent, intense, and poorly resolved conflict were related

to higher levels of teacher-reported externalizing behavior. In contrast, internalizing behaviors were predicted by boys' appraisals of threat and self-blame for the conflict. Significant relationships were not found for girls. Katz and Gottman (1993) similarly reported that mutual hostility expressed between spouses during a laboratory task predicted teacher ratings of externalizing, but not internalizing, problems 3 years later. This pattern of findings is in keeping with the pattern found for concurrent correlations (see Grych et al., 1992). These data suggest that externalizing problems are more closely linked to unresolved aggressive or hostile conflicts, whereas internalizing problems may result from children's appraisals about the conflict. We speculate that children who blame themselves for their parents' disagreements are at greater risk for developing low self-esteem or depression and that children who tend to perceive greater threat and lower coping efficacy when conflict occurs are at greater risk for displaying symptoms of anxiety disorders.

These data are among the first to provide evidence that changes in marital conflict predict changes in adjustment. They indicate that the previously documented relation between conflict and adjustment does not simply represent a concurrent association, and they open the door to further investigation of whether exposure to conflict causes emotional or behavior problems. The data also are in keeping with the findings of an important longitudinal study on the impact of divorce on children. Using large, national samples from Great Britain and the United States, Cherlin et al. (1991) found that boys in both samples displayed poorer adjustment after parental divorce than did children whose parents had not divorced. However, this effect disappeared when predivorce levels of functioning (including marital conflict) were included in the analysis. Although these data are not fine-grained enough to provide an examination of the impact of marital conflict per se, they suggest that predivorce functioning may be more important than parental separation in the understanding of children's adjustment after a divorce (see also Block, Block, & Morrison, 1981). Unfortunately, these data do not speak to the processes that underlie the longitudinal relationship between marital conflict and child adjustment. Next we turn to consider this issue.

### *How Does Marital Conflict Affect Children?*

Research examining specific dimensions of marital conflict has advanced the understanding of the nature of its association with children's adjustment but has not necessarily supported a causal relationship between the constructs. To make use of longitudinal research, hypotheses outlining potential mechanisms of action are needed to guide data collection. Several hypotheses have been offered that posit mechanisms by which exposure to conflict could directly affect children (e.g., Grych & Fincham, 1990; Katz & Gottman, 1991; Margolin, 1981), but very few have been tested. The most promising involve modeling, emotional regulation, appraisals, and coping with stress.

Observing how parents treat each other when they disagree is likely to influence children's internal working models of relationships (Bowlby, 1969), which could then have consequences for an array of social interactions. Children whose parents resolve conflicts through attempts to control, intimidate, and dominate may use similar strategies (in age-appropriate forms) with peers. Modeling thus is most likely to lead to externalizing problems. Observing marital conflict also could affect children's developing ability to regulate their emotions. Conflict between parents can be very emotionally arousing and thus present a challenge to children's regulatory capacities (Katz & Gottman, 1991). Their ability to self-soothe is likely to be affected by the appraisal process as well as by the observation of their parents' means for handling emotions. Difficulties with emotional regulation could be manifested either through externalizing (e.g., impulsiveness and aggression) or internalizing (e.g., anxiety and depression) problems and could interfere with adaptive peer relationships. As noted above, appraisals children make concerning conflict may also have consequences for their adjustment, particularly for internalizing problems. Children who blame themselves for their parents' problems or who feel helpless in the face of conflict may develop low self-esteem or dysphoria, and those who feel threatened and unable to cope may become fearful and anxious. Finally, marital conflict can be conceptualized as a stressor that, when combined with other stressors in a child's life, leads to the development of adjustment problems.

All of these hypotheses are plausible, but none is likely to be sufficient for a complete understanding of how marital conflict affects children. A more thorough analysis of how marital conflict affects children requires attention to more than conflict per se. Interparental conflict is embedded in the larger system of the family, and its impact on children is likely to be shaped by other elements of that system. Although the essence of experimental design is to control all but one variable to isolate its effect, this approach can be misleading when the family is studied, because marital conflict is related, both at the conceptual and the measurement level, to other aspects of family functioning that affect children and because marital conflict's effects may well depend on the configuration of all of these elements. In other words, family variables may act as mediators or moderators of the conflict-adjustment association, and if these variables are not incorporated into a theory, inaccurate inferences could be made about the association between conflict and adjustment.

This point becomes especially crucial in longitudinal research that seeks to make inferences about causation. The existence of a predictive relation does not necessarily indicate that one variable has a direct effect on another, particularly when a number of third variables exist that could plausibly account for the association. In the development of a theory for how marital conflict affects children, it is necessary to specify the aspects of familial and nonfamilial functioning that are likely to be important and to state explicitly how they are related to marital conflict. Broadening the theoretical perspective in this way also shifts the focus from single causal factor models to more realistic multiple causation models. Indeed, Rutter's Isle of Wight and inner London studies clearly demonstrated the interactive effects of stressors on children (cf. Rutter, 1979). In a similar vein, protective factors may offset any deleterious effect of conflict, as shown by Jenkins and Smith's (1990) finding that a good relationship with an adult outside the family was associated with better child adjustment when children were exposed to marital discord. Marital conflict is only one type of family event that may affect children; the presence of other factors, and their interrelationships, also has important effects on child development. The tendency for researchers to focus on unitary causation in the present domain may well reflect their starting point,

which concerns documenting the association between conflict and adjustment. However, a deeper understanding of the impact of conflict necessarily involves more complex, multifactorial models.

Although a number of familial and nonfamilial factors may be important, we believe that three aspects of parent-child relations are necessary components for any theory of the effect of marital conflict on children: discipline practices, parent-child aggression, and the affective quality of the parent-child relationship. As other family theorists have noted (e.g., Belsky, 1984; Margolin, 1981), marital and parent-child relations are interdependent, and thus conflict occurring in the marriage can affect how parents treat their children and vice versa. The critical task for researchers is specifying how marital conflict and parent-child relationships are interrelated, and in the next section we outline an approach for the understanding of relations between marriage, parenting, and child adjustment.

### *Marital Conflict and Parent-Child Relationships*

Marital and parent-child relationships are so tightly interwoven that one cannot draw valid inferences about the effects of marital conflict without simultaneously considering the nature of parent-child relations. Belsky (1984) described the marital relationship as a first-order support for parenting and argued that discord in the marriage thus may undermine effective parenting practices. Research on the transition to parenthood similarly has underscored the importance of marital harmony in the establishment of healthy and satisfying relations between parents and children (see Parke & Tinsley, 1987). Changes in the quality of parent-child relations have been hypothesized to be the critical mechanism by which marital conflict affects children. For example, Fauber and Long (1991) argued that marital conflict is a background variable that affects children only because it disrupts parenting. Even though marital problems clearly can affect parenting, the reduction of their effects to this single path reflects a linear model of causation that we view as overly simplistic. When a systemic perspective is adopted, this sort of linearity is rejected in favor of an attempt to understand how mul-

multiple factors combine to influence child adjustment and how they may in turn be influenced by children's behavior. We believe that it is less productive to focus on the question of whether marital conflict or parent-child relations lead to child adjustment problems than to understand how marital conflict and parent-child relations are related to each other and to child development. Examining their mutual effects will lead to a greater understanding of how the pieces of the family puzzle fit together.

Next we consider how the three aspects of parent-child interaction listed above may inform an understanding of the mechanisms by which conflict may influence children and, in turn, how marital conflict may affect parenting.

*Discipline.* Most research examining marital conflict and parenting has concentrated on parental discipline practices, hypothesizing that conflict in the marital relationship adversely affects the consistency and quality of parenting, which in turn lead to poorer adjustment in children (e.g., Fauber et al., 1990; Jouriles, Pfiffner, & O'Leary, 1988). For example, Fauber et al. (1990) reported that parents' use of guilt or anxiety induction as a means of discipline was related both to marital conflict and internalizing problems in a sample of adolescents. However, this hypothesis may reflect a lack of clarity in the specification of the constructs involved. Whereas marital dissension clearly can disrupt parenting, the mechanism by which the overt expression of that dissension causes ineffective or inconsistent discipline was not specified. We propose that inconsistency in discipline between parents, like overt conflict itself, is more a function of marital discord than it is a mediator of the impact of overt conflict on children.<sup>2</sup> That is, differences in parents' beliefs about child rearing and discipline, overtly expressed or not, are exacerbated by tension and dissatisfaction in the marital relationship. The resulting inconsistencies in rules, expectations, and responses to child misbehavior then may lead to adjustment problems in children (cf. Margolin, 1981).

However, a second process may also operate if disagreements about parenting lead to more frequent overt conflicts. This type of marital conflict is particularly salient to children because it directly concerns them and because it may often occur in their presence. Consequently, disagreements about parenting may have a more powerful effect on them than con-

flicts concerning a less personal subject, such as family finances. This idea is in keeping with the findings that child-related marital conflict was associated with greater shame, self-blame, and fear of being drawn into the conflict (Grych & Fincham, 1993) and that higher self-blame for marital conflict correlated with greater internalizing problems, even after the frequency, intensity, and resolution of conflict were held constant (Grych et al., 1992). These findings may also be relevant to data showing that parental disagreement over child-rearing issues is a better predictor of child behavior problems than is the overall frequency of marital conflict (Jouriles et al., 1991). It is possible that these findings reflect the first path of effect described above; that is, inconsistencies in discipline exist somewhat independently of marital conflict and have a unique effect on children, or that the type of conflict that results (i.e., child-centered conflict) is a more deleterious form of conflict for children. In keeping with our emphasis on multiple causation, it is most likely that both of these factors operate.

In addition to creating greater inconsistency between parents, marital conflict also may lead to particular forms of discipline that have been associated with poorer child functioning. Fauber et al. (1990) proposed that conflict would lead to lax parenting (in contrast to firm parenting) and the use of anxiety-guilt induction as a means of discipline, but found support only for a link with the latter variable. The overt expression of marital conflict may be most closely associated with the use of harsh discipline, particularly if conflicts are aggressive. Rather than reflecting a direct effect of conflict on harsh discipline, however, this may be due to parents' tendencies to become aggressive in conflictual situations.

The relationship among marital conflict, discipline practices, and child behavior most likely is transactional rather than linear. Children who are oppositional may create greater disagreement about how to parent and greater tension in the marriage, which in turn may increase children's acting out. Only longitudinal research can address the temporal relation between marital conflict and child behavior, but treatment outcome research may also be useful because it

<sup>2</sup> This hypothesis is not meant to imply that ineffective discipline always flows from marital discord; clearly, parenting practices are multiply determined.

provides an opportunity for the examination of an intervention's effects (e.g., marital therapy and parent training) on the quality of marriage and parenting. For example, intervention research on child problems emphasizes the importance of marital functioning for child outcome. In a comparison of maritally distressed and non-distressed parents seeking treatment for a conduct-disordered child, Dadds, Schwartz, and Sanders (1987) found that both groups were indistinguishable following child management training but that at 6-month follow-up the maritally distressed group was significantly less likely to have maintained therapeutic gains. Moreover, distressed parents who had also received partner support training maintained improvements at levels comparable to nondistressed parents. Similar research is needed to assess the impact on children of interventions offered to couples seeking help for marital conflict. However, although such research illuminates the role of marital conflict in the maintenance and alleviation of child problems, it does not necessarily further the understanding of the onset of child problems (see section on *Uncovering Assumptions*).

*Parent-child aggression.* Consistent correlations between spouse and child abuse indicate that when spouses are aggressive with each other there is an increased probability that aggression will also be directed at children (e.g., Wolfe, 1985). Similarly, the extent to which parents express verbal or physical aggression during disagreements is likely to be related to aggressive behavior with their child.

Although the covariation of spouse and parent-child aggression is well-documented, the processes by which they are linked is less clear. One plausible explanation focuses on the individual characteristics of the parents, proposing that a tendency to become aggressive when arguing with a spouse may also lead to aggression toward children. This hypothesis suggests that neither marital conflict nor parent-child aggression necessarily leads to the other but instead arise from the same source. Johnson and O'Leary (1987) offered some evidence consistent with this view.

However, there may also be mechanisms by which aggression in one relationship does cause aggression in the other. Most notably, when children intervene in aggressive conflicts between their parents, they may become victims of aggression themselves. Thus, how children

respond to their parents' disagreements is critical for an understanding of marital conflict's effects, and children's appraisals may be an important factor in determining their responses. Specifically, children who feel responsible for a marital conflict may be more likely to try to help the parents resolve it than those who do not. Some support for this idea has been found, in that children were more likely to propose intervening in marital conflicts when they blamed themselves for the conflict and when the content of conflicts was child related (Grych & Fincham, 1993). There also may be reciprocal effects of parent-child aggression on marital conflict. For example, interparental conflict may result when a parent defends a child who is the target of the partner's anger. Consistent patterns of this nature may lead to the development of cross-generational alliances in the family, which in turn may fuel marital discord (Margolin, 1981; Minuchin, 1974).

*Affective quality of parent-child relations.* Parental warmth and affection consistently have been found to be primary correlates of healthy child adjustment (Baumrind, 1971) and in turn have been linked to the quality of the marital relationship (Belsky, 1984; Easterbrooks & Emde, 1988). For example, Cox, Owen, Lewis, and Henderson (1989) reported that after controlling for parents' own adjustment, marital quality predicted mothers' warmth and sensitivity toward their infants and the positivity of fathers' attitudes toward their children and parenting. Other research on the transition to parenthood has linked marital quality to children's functioning and security of attachment (e.g., Goldberg & Easterbrooks, 1984; Howes & Markman, 1989). The process by which marital conflict may interact with the affective quality of the parent-child relationship has received little attention, but at least three paths are plausible.

First, frequent conflict may be emotionally draining to parents and thus reduce their ability to recognize and respond to their children's emotional needs (Goldberg & Easterbrooks, 1984; Margolin, 1988). Fathers in particular may tend to withdraw from their children when they are dissatisfied with their marriages (Dickstein & Parke, 1988; Howes & Markman, 1989). Children may perceive parental inattention or withdrawal as rejection of them, which in turn may have a host of effects on their emotional and behavioral adjustment. Fauber et

al. (1990) found support for this mediational hypothesis in a sample of adolescents from intact families. They reported that marital conflict correlated with parental acceptance or rejection, which in turn correlated with both internalizing and externalizing problems. Children may also experience feelings of rejection if marital conflict leads to greater tension or conflict between parents and children.

Second, the affective quality of parent-child relations is likely to affect children's appraisals of marital conflict. Children who feel they have a close and stable relationship with both parents may be affected less when conflict occurs than children who are less secure in their relationships. Children with stable parental relationships may be less distressed because they believe that family cohesion is strong and that their parents will protect them from harm. Thus, warm parent-child relations may buffer children from the effects of conflict by decreasing children's appraisal of threat. On the other hand, children who feel very close to one parent but not the other may feel the need to choose sides or defend one parent during a marital conflict, increasing the likelihood that children will become part of the conflict or that cross-generational alliances will be reinforced. As a result, the less close parent may withdraw further and thus intensify children's feelings of loss or rejection. The quality of parent-child relationships, therefore, may reduce the stressfulness of marital conflict under some conditions but increase it in others.

Third, the "spillover" hypothesis (see Engfer, 1988) suggests that the quality of the marriage directly affects parents' affective relationship with their children. It follows that parents who frequently express hostility toward each other are also more likely to respond negatively toward their children. Kerig, Cowan, and Cowan (1993) recently found support for the spillover of negative affect, especially between parents and their cross-sex child. Fathers lower in marital satisfaction were more negative toward their daughters, and less maritally satisfied mothers were more likely to reciprocate sons' negative affect and to respond negatively when their daughters were assertive. The reciprocal nature of this relationship was illustrated by the finding that, compared with children from happy marriages, daughters from less-satisfied marriages were less compliant with their fathers than with their mothers. This study also underscores the

importance of researchers attending to the gender of both parents and children while studying family interactions.

Each aspect of the parent-child relationship discussed above also may affect children by threatening attachment bonds between parents and children. The mere occurrence of conflict can raise the specter of divorce in a society in which up to 40% of children will spend part of their lives in a single-parent family (Emery, 1988). To the extent that the quality of children's relationships with their parents also is disturbed, children may fear the loss of one or both of their primary attachment figures. When parents withdraw from their children and become increasingly negative or even aggressive, children's sense of security and stability can be threatened. As noted above, their attempts to make sense of and respond to the changes in their families could reduce these fears, perpetuate the problems, or lead to emotional or behavioral problems.

Although these aspects of parent-child interactions are distinct, they are likely to be inter-related. Marital tension can lead to inconsistencies in parents' parenting behaviors (e.g., rules and discipline strategies), and these differences may be expressed openly and therefore make both the disparity between the parents and the dissatisfaction with each other more salient to the child. Children following one parent's rules may be perceived by the other parent as misbehaving, leading to further attempts to discipline, which are likely to be undermined by the lack of agreement between parents. In some cases, one parent may defend the child and oppose the spouse, resulting in greater marital conflict. Cross-generational coalitions may result. The undermined parent may become frustrated and angry, and begin using authoritarian tactics (including verbal and physical aggression) to extract compliance, or may withdraw and become less involved in parenting.

These scenarios suggest that exposure to marital conflict cannot be expected to have uniform effects; the impact it has depends on the combinations of events and interactions inside (as well as outside) the family. Thus, some children exposed to marital conflict may develop signs of depression because they blame themselves for the conflict and feel rejected by one of their parents, whereas others may learn to react to peer conflict with aggression. Another group, those having close relations with both parents,



may attribute conflict to temporary, external causes and exhibit no behavior problems at all.

In short, investigation of the effects of marital conflict on child adjustment requires a wide lens. It is important to investigate what types of conflict are stressful for children, but it is equally critical to assess other parts of the family system to understand its effects on child functioning. At the same time, reducing the impact of marital conflict to indirect effects wholly mediated by parenting does not take into account that marital conflict can be an emotionally charged event laden with meaning for children. As children actively construct their views of themselves and relationships, and develop the ability to regulate powerful affect, the interactions between their parents will have profound significance for them.

The ideas we are proposing are complex but testable with longitudinal designs. It is possible to assess with repeated measurements whether increases in certain types of marital conflict actually predict disruptions in discipline, parent-child aggression, and the affective quality of parent-child interactions and whether greater emotional or behavioral problems follow from these changes. Such designs would, of course, also provide a test of the reciprocal effects of child behavior on parenting and marital conflict and of parent-child relations on conflict. Other familial (e.g., emotional expressiveness) and nonfamilial (e.g., peer relations) factors may also be important, but we view the assessment of specific dimensions of marital conflict (by both children and parents) and the inclusion of these aspects of parent-child relations to be fundamental to a complete theory of marital conflict's effect on children. Assessing the individual and cumulative effects of these variables as they interact over time is a formidable task and gives rise to several issues that must be addressed for research assessing mechanisms of action. In the last section of this article, we identify and briefly discuss some of these issues.

#### Toward More Informative Longitudinal Research

The challenge of accurate measurement and analysis of change over time has received considerable attention of late, including a special section in the *Journal of Consulting and Clinical*

*Psychology* (Gottman & Rushe, 1993). Rather than describe sophisticated statistical techniques, we focus on conceptual issues inherent in making inferences about the effects of one variable on another. Although this section highlights how to make longitudinal research more informative, it also offers several observations that apply to cross-sectional studies. Where appropriate, therefore, we comment on how to advance understanding of the concurrent marital conflict-child adjustment association.

#### *Testing the Null Model Versus Testing Competing Models*

In keeping with the notion that theoretical development is critical for useful longitudinal research, testing the existence of a longitudinal association against a null model is far less powerful than are tests of competing theoretical positions. Comparing the somewhat inconsistent findings of longitudinal research on marriage (which tests against the null model) with the fairly consistent findings in comparative treatment outcome research (which tests different theoretical positions) illustrates this point quite well (see Bradbury, in press; Fincham, Fernandes, & Humphreys, 1993). One of the advantages of such a strategy is that it begins to address third variable effects. This issue is particularly salient when structural equation modeling is used to analyze relations among variables in either longitudinal or cross-sectional studies. One strength of this data-analytic technique is that it forces researchers to make explicit their causal models. Although it is not a trivial achievement to show that a model fits the data set, an unknown number of additional models may also fit the data. The power of this approach therefore lies in the comparison of the fit of different models. For example, one can then answer such questions as whether the predictive power of marital conflict improves when parent-child aggression is added to the model.

#### *Conceptualizing and Analyzing Change*

Ascertaining the effect of one variable on another over time presents a significant challenge that involves conceptual as well as statistical issues. In longitudinal studies, it is common to strive for control by statistically partialing out the effect of a variable. Thus,

marital conflict at Time 2 may be statistically removed when marital conflict at Time 1 is used to predict child problems at Time 2. Conceptually, this results in looking at whether change in marital conflict predicts a static measure of adjustment at Time 2. Similarly, child problems at Time 1 may be partialled out when predicting Time 2 child problems from Time 1 marital conflict. In this case, change in child problems is predicted from a static measure of marital conflict. Both these procedures reflect a conceptual problem. To illustrate the problem, consider the first example. We argue that one would not necessarily expect change in conflict to predict later adjustment; rather, we believe that change in conflict may predict change in adjustment. For instance, it may not be that a child who experiences a relatively large increase in conflict (compared with other children) will be one of the most poorly adjusted. But this child would be expected to exhibit a relatively large change in adjustment; whether that makes him or her one of the most poorly adjusted is uncertain. In keeping with this argument, we found that using residualized change scores to test whether changes in conflict predicted changes in adjustment produced significant results for boys, whereas using partial correlation analyses yielded non-significant correlations (Fincham, Grych, & Osborne, 1993). Such findings highlight the importance of choosing analytic strategies that reflect one's conceptualization of the relations among variables.

### *Uncovering Assumptions*

Implicit in much longitudinal data are assumptions about the nature of the onset and maintenance of a given outcome. In particular, it is often assumed that factors that lead to the development of a disorder are the same as those that maintain the disorder. Whether marital conflict should be properly viewed as causing or maintaining child adjustment problems is unclear. This assumption has at least two important implications. First, failure to exclude participants chronically exposed to conflict or who chronically exhibit adjustment difficulty at the initiation of the study can yield spurious relations (cf. Depue & Monroe, 1986). Although clearly recognized and eloquently discussed in risk research (e.g., Garnezy, 1988; Rutter,

1988), the need for more homogeneous samples is not as widely recognized as it ought to be. Second, different processes may operate regarding the impact of increases in conflict versus decreases in conflict. Most obviously, decreases in conflict may not lead to improved adjustment as peers, teachers, and others may actively maintain the child's negative behavior once it has been initiated. Accordingly, we are less sanguine than Rutter and Rutter (1993) regarding the value of interventions and of reversals of key experiences in illuminating causal processes. When such actions (e.g., marital therapy) ameliorate the effects of an earlier experience (e.g., exposure to interparental conflict), they help illuminate casual mechanisms, but the failure to ameliorate such effects does not rule out the possible causal impact of the earlier experience.

### *Simple Causation Versus Causal Chains*

The example regarding maintenance hints at the possibility that longitudinal relations between marital conflict and child adjustment may reflect the operation of causal chains. Except for the notion that the impact of conflict on children may be mediated by parenting practices, the field has virtually ignored this issue. Yet the relation between conflict and child outcome may be materially influenced by adverse experiences with the extended family, peers, and the school system when children exhibit stress due to being exposed to conflict. Thus, exposure to interparental conflict may be most deleterious when it is followed by particular events (e.g., peer rejection), a circumstance that may help account for variability in outcome. The need to include additional constructs in models of the relation between marital conflict and child adjustment is evident in both cross-sectional and longitudinal research.

### *Linearity*

Our analysis, like many others in the field, assumes a linear relation between conflict and adjustment, an assumption that may well prove to be incorrect. It seems quite conceivable that conflict has a deleterious impact only when it crosses a certain threshold. Lack of linearity also raises the possibility of discontinuity between garden-variety marital conflict and more

severe forms of conflict that we cannot afford to ignore both at a conceptual level and in statistical analyses. Specifically, the outcome of exposure to garden-variety marital conflict may show greater variability, reflecting preexisting individual differences in children, whereas exposure to very severe conflict, particularly physical violence, may decrease variability in outcome.

### *Change Is Not Change Is Not Change*

It follows from the last observation that not all change may have the same meaning, even when it is linear. For example, a 10-unit change in conflict at the negative end of the distribution may not be equivalent to a similar change at the center of the distribution or at the positive end. Thus, the impact of increased conflict may depend on the preexisting level of conflict to which the child has been exposed. A related, but different, issue is that researchers tend to focus heavily on using initial levels of conflict to predict change in child functioning but have done little to examine change in conflict as a predictor variable.

### *The Role of Individual Differences*

Perhaps the most significant statement that can be made about children's responses to marital conflict is that they differ. Such variability may account for the low correlations noted at the outset of this article, which, in turn, can be seen to index the limited understanding of this association. One means of increasing the magnitude of such correlations is to identify individual differences that make children particularly vulnerable and thereby study more homogeneous groups. The logic underlying this suggestion is that marital conflict is a stressful or challenging event that accentuates preexisting characteristics and allows existing vulnerabilities to be realized as adaptational failures. This is hardly a novel suggestion as diathesis-stress models are to be found in numerous literatures, yet they have had little impact on this field of inquiry. As longitudinal research is increasingly used, the value of these models should become apparent.

### Conclusion

We began by asking whether research on marital conflict and child adjustment was ready for longitudinal research. Our answer to this question is a tentative and qualified yes. Existing research in this area provides isolated pieces of information for a theory on how conflict could cause adjustment problems but offers little information on the mechanisms of change. Worthwhile longitudinal research is possible if the pieces of information can be tied together with specific hypotheses regarding how dimensions of conflict interact with other aspects of the family system (including its relation to the broader community) to produce behavioral or emotional problems. Our goal was to provide some of this connective tissue in the hope of catalyzing sophisticated longitudinal research. Toward this end, we offered several observations designed to facilitate such theoretical development and went on to identify a number of issues that need to be addressed in longitudinal research. Whether we have been successful in our attempts to clarify theoretical issues or to clarify the challenges faced in longitudinal research will be determined by the extent to which they facilitate the emergence of theoretically driven, longitudinal investigations into the processes underlying the relation between marital conflict and child adjustment.

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