

Conflict in Families and the Psychological Adjustment of Preadolescent Children

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We examined the cross-sectional association between conflict in families and child psychological adjustment in 72 4th–5th graders. Multiple informants (parents, children, and teachers) assessed conflict and anger in the social climate of the home, marital discord, negative emotional tone in the parent–child relationship, and child adjustment. As predicted, child adjustment was more strongly related to family conflict than to marital discord. There was a stronger association between family conflict and maladjustment in girls. Moreover, the association between a general climate of conflict at home and child maladjustment was independent of anger and discord in the marital or parent–child relationships. During the study of the effects of interpersonal conflict at home, it appears to be important to identify the locus of anger and aggression. Findings suggest that researchers should distinguish between a general climate of conflict in the family and interparental discord.

We examined anger and conflict in families and related it to preadolescent children's psychological adjustment. The term *conflict* is used here to describe behaviors between family members that range from verbal disagreements and criticism to acts of physical aggression. Different theoretical perspectives, such as attachment theory, social learning theory, and cognitive theory, agree that children are placed at increased risk for the development of behavioral and emotional problems by child-rearing environments in which interpersonal relations are characterized by anger and conflict (cf. Grych & Fincham, 1990; Margolin, 1981; Marvin & Stewart, 1990). It is therefore not surprising that adolescents' descriptions of high levels of family conflict have been associated with self-reported distress and psychological symptoms in recent

cross-sectional studies (Kleinman, Handal, Enos, Searight, & Ross, 1989; Kurdek & Sinclair, 1988; Slater & Haber, 1984) and in an analysis of 1-year longitudinal data (Mechanic & Hansell, 1989). In fact, empirical evidence suggests that ongoing conflict at home has a greater impact on adolescent distress and symptoms than does parental divorce (Borrine, Handal, Brown, & Searight, 1991; Kurdek & Sinclair, 1988; Mechanic & Hansell, 1989; Slater & Haber, 1984). Family conflict was also linked to lower self-esteem among adolescents in one cross-sectional study (Slater & Haber, 1984), but not in the longitudinal study (Mechanic & Hansell, 1989).

Although most of the literature on family conflict has focused on adolescents, several studies have used samples with wide age ranges, from preschoolers to adolescents. In a study of 6–18-year-olds, parents' reports of conflict at home were associated with children's self-reported aggression (Weidner, Hutt, Conner, & Mendell, 1992). In another study of chronically ill 4–14-year-old children, parents' reports of family conflict correlated with their ratings of less sociability and more problems of undercontrol among the children (Kronenberger & Thompson, 1990). However, there was not a significant association between parents' ratings of conflict and children's internalizing symptoms. A study of child psychiatric inpatients (aged 6–13 years) indicated that the children who attempted or

We would like to thank the principals, teachers, parents, and children who participated in the study. We are also grateful to Andy Christensen, Steve Lopez, Gayla Margolin, and three anonymous reviewers for their helpful comments on an earlier draft of this article. Rena L. Repetti's participation in the preparation of this article was supported by a FIRST award R29-48595 from the National Institute of Mental Health.

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thought about suicide described their families as being higher in conflict than did the nonsuicidal children (Asarnow, 1992). Unfortunately, none of these studies examined the effects of family conflict separately for the different age groups. Thus, although there is empirical evidence of an effect of family conflict on adolescent adjustment, the effect on younger children has not been established.

Differentiating Family and Marital Conflict

Related to the literature on family conflict is a large body of research focusing specifically on discord between parents (cf. Grych & Fincham, 1990). Although the strength of the association varies from study to study, a recent meta-analysis suggests that the association between interparental conflict and behavioral problems is fairly weak but detectable for boys and that there is no reliable association for girls (Reid & Crisafulli, 1990). Among the significant findings, however, it is impossible to determine the extent to which results that have been attributed specifically to conflict between parents are actually caused by a pervasive climate of anger and discord in the home.

Marital theorists have long suspected that, in addition to the adverse effects of direct observations of discord between parents, children may also suffer because of the impact that marital problems have on the parent-child relationship (Christensen & Margolin, 1988; Margolin, 1981). Parents in a discordant marriage may become withdrawn or hostile toward their children or they may attempt to gain the alliance of the child against the other parent. Christensen and Margolin (1988) have documented the spread of marital conflict to the parent-child relationship among families in which the parents are in an unhappy marriage. Moreover, other empirical evidence confirms that parenting behaviors, such as a lack of warmth, rejection, and emotional withdrawal, mediate at least part of the association between marital discord and child maladjustment (Belsky, 1985; Burman, John, & Margolin, 1987; Conger et al., 1992; Fauber, Forehand, Thomas, & Wierson, 1990; Peterson & Zill, 1986; Tschann, Johnston, Kline, & Wallerstein, 1989). If, as these studies indicate, interparental conflict often does not remain confined within the marital relationship, then re-

ports of marital conflict may, in many cases, also reflect discord throughout the family.

To avoid a misspecification of effects, we included separate measures of family conflict and marital conflict. The distinction between the entire family system and a subsystem within the family is similar to Repetti's (1987) description of common and individual social environments. In our study, the common social environment was the social climate that was shared by all family members. We used the family's self-reported behavioral norms for expressing anger and coping with conflict as an indicator of the degree of conflict in the common social environment of the home. Parents and children described the extent to which interactions among family members tended to be openly angry, hostile, and aggressive. The individual social environment of primary interest was the separate social space surrounding the parents (i.e., the social climate of their marriage). Marital discord was indicated by the parents' reported use of aggression to resolve marital disputes and by dissatisfaction with their marriage.

Because most researchers of marital conflict have not distinguished between the family and the marriage as units of analysis, they have not been able to address whether discord between parents is particularly stressful for a child or more stressful than living in a home in which interpersonal conflict and open expressions of anger characterize all family relationships. In an exception to that trend in the literature, Kurdek and Sinclair (1988) asked adolescents to describe their perceptions of both interparental conflict and family conflict; they found that a measure of their psychological adjustment was about equally correlated with the two ratings ($r_s = .37$ and $.32$, $ps \leq .01$, respectively).

There are at least two reasons to expect that the impact of a general family atmosphere of anger and discord would be greater than the specific impact of interparental conflict, particularly when parents' perceptions of discord, rather than children's perceptions, are used. One basis for this prediction is an expected difference in the frequency with which the child would be exposed to anger and conflict in the home. It would be impossible for children to escape a general social climate of anger and conflict in their home. By contrast, parents in a troubled marriage often strive to maintain the image of a harmonious relationship and may succeed in

keeping many of their dissatisfactions and angry disputes hidden from their children. Although they may accurately describe their marriage as unhappy and discordant when completing a confidential questionnaire, that does not necessarily imply that their children observe frequent open conflict between them. This point was supported by a recent study in which it was reported that there were modest correlations between the descriptions of marital conflict provided by preadolescent children and their parents ($r_s = .30$ and $.39$, $p_s \leq .01$, respectively; Grych, Seid, & Fincham, 1992). More important, measures of the children's psychological adjustment were much more strongly related to their own reports of the frequency and intensity of interparental conflict than to their parents' reports.

A second basis for our prediction is an expected difference in the extent to which the child would become involved in angry and conflictive interactions. Among families in which open expressions of anger and aggression are the norm, children not only observe fighting among different family members, but they would presumably also become involved in angry conflicts with their parents and siblings. Some evidence suggests that this may be especially true for daughters (Vuchinich, Emery, & Cassidy, 1988).

Greater exposure to and involvement in hostile and aggressive interactions at home provide children with fewer opportunities to learn adaptive ways of handling anger and resolving disputes. For instance, researchers have found that children exposed to harsh discipline practices at home tend to develop maladaptive social information processing patterns, which mediate the impact of harsh discipline on subsequent aggressive behavior at school (Weiss, Dodge, Bates, & Pettit, 1992). In this type of home environment, children may develop more negative self-perceptions and come to view the world as a hostile place. Thus, these children may be at an increased risk for low self-esteem and both internalizing and externalizing behavior problems. Interestingly, marital theorists have identified frequency and child involvement as two dimensions of marital conflict that may be critical to an understanding of the impact of marital conflict on children's adjustment (Fincham & Osborne, 1993). Because of more frequent exposure to and direct involvement in aggressive interactions, we expected that a child's self-perception and behavioral adjustment would be more

strongly associated with ratings of a general climate of conflict in the family than with ratings of conflict within the marital relationship per se.

The Study

In this correlational study we focused on anger and conflict in the homes of preadolescent children and related it to the children's psychological adjustment. We studied third- through fifth-grade children in an attempt to replicate and extend reliable findings from the literature on adolescence to a younger age group: 8-11-year-olds. Two hypotheses were tested. The first hypothesis predicted that children's and parents' reports of higher levels of family conflict would be associated with three indicators of poor psychological adjustment among the children: more behavioral problems at home and at school and lower perceived self-competence. Second, child adjustment was expected to correlate more strongly with ratings of family conflict than with parents' reports of marital conflict.

Most of the previously reported associations between family conflict and child or adolescent adjustment were based on ratings obtained from a single source (either child or parent). We used multiple informants (mother, father, child, and teacher) in this study to limit problems associated with confounding attributable to respondent biases. Therefore, we highlight results that were based on "cross-source" correlations, which were based on measures completed by different informants. The advantage of using multiple informants in this type of study is balanced by modest levels of agreement between independent raters of child adjustment (Achenbach, McConaughy, & Howell, 1987; Hinshaw, Han, Erhardt, & Huber, 1992), in part reflecting the high degree of situational specificity of child behavior problems. In short, we addressed respondent bias problems through the use of multiple informants while acknowledging limits on the expected level of agreement among different sources.

Our analyses also addressed the possible confounding role of angry parent-child interactions in the association between family conflict and child maladjustment. The family conflict scale that we used asked family members to describe the general norms for expressions of anger and aggressive behavior in their home. We wondered whether the subjects in our study primar-

ily had the parent-child relationship in mind when they were responding to the family conflict questions; we also wanted to rule out the possibility that any family conflict results actually represented no more than the well-documented association between parent-child conflict and child behavior problems. In particular, we wanted to control for the obvious impact that child aggressiveness has on conflict with parents and other family members. Therefore, we examined the association between family conflict and child adjustment problems after controlling for parents' ratings of a negative emotional tone in the parent-child relationship.

Method

Sample and Procedure

Families were recruited through letters sent home to parents of third-, fourth-, and fifth-grade children at five parochial schools in two metropolitan areas in Pennsylvania and New Jersey. Children were interviewed at school, and questionnaires were completed by parents at home. In most cases, the child and parent measures were obtained within 2 weeks of each other. Teachers completed classroom behavior rating scales within 6 weeks of the initial child interview.

Of the approximately 250 families contacted, 81 families (32%) agreed to participate. Similarly low response rates have been reported in other studies in which families were recruited through schools (cf. Mechanic & Hansell, 1989). Nine families with only one parent living at home were dropped from the analyses. The final sample of 72 children (32 boys and 40 girls) ranged in age from 8 to 11 years ($M = 9.2$, $SD = 1$). Parent questionnaires were returned for 67 children (93%). In 59 cases, questionnaires were returned from both parents; in 8 cases only mothers returned the questionnaire. Teacher ratings ($n = 16$) were obtained for all 72 children.

The participants were predominantly White (94%), Catholic (91%) families with an average yearly family income of about \$55,000 in 1989-1990. Family size ranged from one to five children; the majority of the families (81%) had two or three children living at home. In all cases, two parents lived at home with the child, including four cases of blended families in which a biological parent and a stepparent lived with the child.

Measures

Family conflict. The nine-item Conflict subscale of the Family Environment Scale (FES; Moos & Moos, 1981) was used to assess perceptions of family conflict. This is a well-accepted measure with demonstrated validity and reliability (Touliatos, Perlmutter, & Straus, 1990). It was used in all but one of the studies of family conflict reviewed earlier. A high

score indicates more openly expressed anger, aggression, and conflict among family members (e.g., "Family members sometimes get so upset they throw things," "We fight a lot in our family"). Parents were given a 4-point response scale (mostly true, somewhat true, somewhat false, and mostly false) that was based on feedback from an earlier study that showed that the simple true-false response option was unsatisfying for adults to use (Cronbach's alphas = .83 and .78 for mothers and fathers, respectively). When we converted responses from the 4-point scale to the usual 2-point true-false scale for comparison purposes, the scores for the families in our study (mothers, $M = 3.12$, $SD = 2.3$; fathers, $M = 3.04$, $SD = 2.2$) were well within the norms from a national sample ($M = 3.31$, $SD = 1.9$; Moos & Moos, 1981). There was a significant correlation between mothers' and fathers' scores on the Conflict subscale of the FES ($r = .39$, $p \leq .01$), which was similar to parent agreement results from other studies (Weidner et al., 1992). In addition, the patterns of correlations between mothers' and fathers' separate Conflict scores and the other variables in this study were highly similar. Therefore, for simplicity of presentation, we averaged mothers' and fathers' perceptions of family conflict to obtain a mean parental score for family conflict.

To assess preadolescent children's perceptions of family conflict, we modified the FES Conflict items to match the format used in Harter's (1985) Self-Perception Profile for Children. Children indicated which of two families was more like their family and whether that family was "really" like their family or only "sort of" like their family (e.g., "In some families, family members fight a lot, but in other families, family members don't fight much at all. Which of these families is most like your family? Is this really true for your family or only sort of true for your family?"). There was an acceptable level of internal consistency for this modified scale (Cronbach's alpha = .80). As shown in Table 1, children's perceptions of family conflict agreed with their parents' perceptions to roughly the same degree that the mothers' and fathers' perceptions agreed with each other ($r = .38$, $p \leq .001$).

Marital discord. Marital aggression and marital satisfaction were used as two indicators of marital discord. First, parents rated their use of verbal aggression during marital disputes on the Verbal Aggression subscale of the Conflict Tactics Scale (Straus, 1979). The Verbal Aggression subscale includes four items (e.g., "Insulted or swore at the other one") that respondents rate on a 7-point scale (0 = never, 6 = more than 20 times) to indicate how often they used each tactic in the past year (Cronbach's alphas = .70 and .80 for mothers and fathers, respectively). The Physical Aggression subscale was not used because of anticipated objections from the schools. Partners' separate reports of their use of verbal aggression during marital disputes were significantly correlated ($r = .38$, $p < .01$). As with the measure of family conflict, we averaged mothers' and fathers' scores to obtain a mean marital aggression score. Compared with national survey data, the overall Verbal Aggression

Table 1
Pearson Correlations Between Conflict and Psychological Adjustment for Both Sexes

Variable	<i>n</i>	1	2	3	4	5	6	7	8
Family conflict measures									
1. Child's report of family conflict	72	—							
2. Parents' average report of family conflict	67	.38**	—						
Marital discord measures									
3. Parents' average report of marital satisfaction	67	-.16	-.51**	—					
4. Parents' average report of verbal aggression with spouse	67	.07	.45**	-.51**	—				
Child adjustment measures									
5. Child's perceived self-competence	72	-.58**	-.30*	.14	.04	—			
6. Parents' average report of internalizing behavior	72	.22	.32*	-.07	.11	-.17	—		
7. Parents' average report of externalizing behavior	72	.35*	.55**	-.29*	.20	-.33*	.75**	—	
8. Teacher's report of behavior problems	72	.03	.34*	-.22	.09	-.13	-.02	.18	—

* $p < .05$. ** $p < .05$ with Bonferroni correction.

score for couples in this study ($M = 7.0$, $SD = 4.3$) was at the 65th percentile (Straus, 1979), indicating slightly higher than average conflict between parents in this study.

The second indicator of marital discord was parents' scores on the Dyadic Adjustment Scale (DAS), a 32-item valid and reliable measure of marital adjustment (Spanier, 1976; Touliatos et al., 1990). Mothers' and fathers' scores were highly correlated ($r = .62$, $p < .001$). Like the other family and marital variables, we averaged parents' scores to obtain a mean marital satisfaction score. The overall marital satisfaction score for couples in this study ($M = 111.9$, $SD = 17.1$) was similar to mean scores for married couples in a normative sample ($M = 114.8$, $SD = 17.8$) and well above scores for divorced couples ($M = 70.7$, $SD = 23.8$; Spanier, 1976). There was a significant negative correlation between parents' marital satisfaction scores and their marital aggression scores ($r = -.51$, $p \leq .001$).

As shown in Table 1, children's perceptions of family conflict were not related to their parents' reports of marital satisfaction ($r = -.16$) or to marital aggression ($r = .07$). However, parents' perceptions of family conflict were significantly associated with their reported use of aggression during marital disputes ($r = .45$, $p \leq .001$) and negatively associated with marital satisfaction ($r = -.51$, $p \leq .001$).

Child psychological adjustment. We argued earlier that exposure to and involvement in angry and conflictive family interactions would influence children's self-perceptions and behavioral adjustment. We therefore assessed three aspects of adjustment in this study: the child's perception of self and behavior problems at home and at school. We used the Self-Perception Profile for Children (Harter, 1985), a 36-

item interview measure, to assess children's perceptions of their competence in various domains, such as scholastic, athletic, and social relations (e.g., "Some kids feel that they are very good at their school work, but other kids worry about whether they can do the school work assigned to them. Which kind of kid is more like you? Is that only sort of true for you or really true for you?"). Responses to all 36 items were summed to create an overall measure of perceived self-competence.

Parents rated child behavior using the Child Behavior Checklist (Achenbach, 1978; Achenbach & Edelbrock, 1979). Scores on this 113-item symptom checklist are based on norms for a child's sex and age group (in this case, 6-11-year-olds). Two summary scores were computed: one for externalizing behavior problems, which includes aggressive, hyperactive, and delinquent behavior, and one for internalizing behavior problems, which includes social withdrawal, somatic complaints, and depressive symptoms. There was a high degree of interparental agreement on both scales (internalizing behavior problems, $r = .51$, $p \leq .001$; externalizing behavior problems, $r = .65$, $p \leq .001$). Mothers' and fathers' data were averaged to create a mean parental score for internalizing and externalizing behavior problems. Most internalizing and externalizing behavior problem scores in this sample were in the normal range, with mean T scores ranging from 52 to 53 for boys and 52 to 55 for girls. As can be seen in Table 1, a child's perception of himself or herself as competent was negatively correlated with the parents' reports of more externalizing problems ($r = -.33$, $p \leq .01$) but was not correlated with reports of internalizing problems ($r = -.17$).

Examination of boys' and girls' data separately revealed that there were significant sex differences in

the relation between self-reported competence and parents' reports of both internalizing ($r_s = .14$, ns , and $-.38$, $p \leq .05$, for boys and girls, respectively, $z = 2.11$, $p \leq .05$) and externalizing ($r_s = .12$, ns , and $-.57$, $p \leq .01$, for boys and girls, respectively, $z = 3.00$, $p \leq .01$) behavior problems. In both cases, there was a significant negative correlation between girls' perceived self-competence and their parents' reports of behavior problems but nonsignificant correlations for boys.

Teachers assessed children's behavior in the classroom using the Conners Teacher Rating Scale (Conners, 1969). This 39-item scale assesses a variety of behavior problems, such as conduct problems, hyperactivity, and anxious-passive behavior. Responses to the items are summed to reflect an overall measure of the child's behavioral adjustment at school. In contrast to the level of agreement between mothers and fathers, teachers' observations of behavior problems at school were not related to the parents' reports of internalizing and externalizing behavior problems ($r_s = -.02$ and $-.18$). As noted earlier, low levels of agreement between raters of child adjustment are common (Achenbach et al., 1987; Hinshaw et al., 1992) and, in part, reflect a high degree of situational specificity of child behavior problems. As with the parents' ratings, there was a significant negative correlation between girls' perceived self-competence and teachers' reports of behavior problems at school ($r = -.38$, $p \leq .05$) but a nonsignificant correlation for boys ($r = -.02$).

Negative emotional tone in the parent-child relationship. Although our study did not focus on parent-child conflict, the parent questionnaire included a six-item measure of negative emotional tone in the parent-child relationship. Parents rated how often feelings of rejection, anger, hostility, tension, and disappointment characterized their interactions with their child (e.g., "Between us there is a feeling of anger," "I feel rejected as a parent"). As expected, mothers' descriptions of a negative emotional tone in the mother-child relationship (Cronbach's alpha = .79) were significantly correlated with their ratings of family conflict ($r = .39$, $p \leq .001$) and with their ratings of child behavior problems ($r_s = .59$ and $.36$, $p_s \leq .001$ and $.01$, for externalizing and internalizing symptoms, respectively). Similarly, fathers' descriptions of a negative emotional tone in the father-child relationship (Cronbach's alpha = .78) were significantly correlated with their ratings of family conflict ($r = .48$, $p \leq .001$) and with their ratings of child behavior problems ($r_s = .55$ and $.49$, $p_s \leq .001$, for externalizing and internalizing symptoms, respectively).

Results

The correlations among the eight main variables in this study are reported in Table 1. To control for experimentwise error, we computed Bonferroni-adjusted probabilities for this 8×8 Pearson product-moment correlation matrix; these are also reported in Tables 2 and 3. To

address potential problems with respondent biases inflating correlations, we direct the reader to the cross-source correlations for each hypothesis. We tested for possible interactions and main effects of child age and grade level in our analyses and found none, which was not surprising given the limited age ranges. Controlling for the number of siblings also did not change the results. Thus, the results that are reported here were not moderated or confounded by child age or family size.

The first hypothesis predicted that family conflict would be associated with child maladjustment. To test this hypothesis, we computed a multivariate regression with all four child adjustment measures simultaneously regressed on the two indicators of family conflict (i.e., children's ratings and parents' averaged ratings). Overall, there was a significant association between family conflict and child adjustment problems (Wilks's lambda = .57), $F(4, 62) = 11.6$, $p \leq .001$, with a high canonical correlation of .65 (.59 for boys, .76 for girls).

To control for the possible confounding influence of conflict in the parent-child relationship, we performed another multivariate regression in which the four child adjustment outcome measures were simultaneously regressed onto the two measures of family conflict (i.e., child ratings and parents' averaged ratings) and the two measures of negative emotional tone in the mother-child and father-child relationships. The independent effects of the two types of variables (i.e., family conflict and parent-child negative emotional tone) were examined. After controlling for negative emotional tone in the parent-child relationship, we found that the association between family conflict and child maladjustment remained significant (Wilks's lambda = .68), $F(4, 53) = 6.24$, $p \leq .001$, with a high canonical correlation of .57 (.45 for boys, .77 for girls). Similarly, after controlling for the two family conflict variables, we found a significant association between the parents' ratings of a negative emotional tone in their relationships with their child and the child's maladjustment (Wilks's lambda = .64), $F(4, 53) = 7.47$, $p \leq .001$, with a high canonical correlation of .60 (.51 for boys, .70 for girls). In short, although feelings of anger, hostility, and rejection in the parent-child relationship were associated with child maladjustment, they did not account for

Table 2

Pearson Correlations Between Conflict and Psychological Adjustment for Girls Only

Variable	<i>n</i>	1	2	3	4	5	6	7	8
Family conflict measures									
1. Child's report of family conflict	40	—							
2. Parents' average report of family conflict	35	.49*	—						
Marital discord measures									
3. Parents' average report of marital satisfaction	35	-.10	-.55**	—					
4. Parents' average report of verbal aggression with spouse	35	-.09	.36*	-.54**	—				
Child adjustment measures									
5. Child's perceived self-competence	40	-.68**	-.59**	.16	.09	—			
6. Parents' average report of internalizing behavior	35	.37*	.48*	-.15	.15	-.38*	—		
7. Parents' average report of externalizing behavior	35	.39*	.67**	-.35*	.21	-.57**	.80**	—	
8. Teacher's report of behavior problems	40	.16	.25	-.12	-.01	-.38*	.01	.28	—

* $p < .05$. ** $p < .05$ with Bonferroni correction.

the strong association found between ratings of family conflict and child maladjustment.

Follow-up multiple regressions in which each of the four child adjustment outcome measures were analyzed separately revealed a similar pattern of results. Of particular interest was the robustness of the association between family conflict and children's externalizing behavior problems. Parents' ratings of externalizing problems remained significantly associated with family conflict (whether rated by parents or children) in regressions that controlled for a negative emotional tone during mother-child and father-child interactions.

The robust association between the two family conflict variables and the set of child adjustment outcomes seemed to warrant further exploration of the individual correlations. Table 1 shows that all eight of the correlations between two measures of family conflict and four measures of psychological adjustment were in the predicted direction and that six of the correlations reached statistical significance. Parents' reports of family conflict were significantly related to all four measures of child adjustment. Children's perceptions of family conflict were related to their reports of lower self-competence and to the parents' reports of more externalizing behavior problems. Three of the five cross-source correlations were significant. Children

from homes that were characterized by parents as being more conflictive perceived themselves to be less competent, and their teachers described more behavior problems at school. Children from homes that they themselves characterized as more conflictive were described by their parents as displaying more externalizing behavior problems. Only two of the correlations were significant with the Bonferroni correction, and both of these were based on data from the same informant. Children who described a more conflictive family environment also reported less perceived self-competence, and parents who described a high level of conflict among family members observed more externalizing behaviors in their child.

The results of separate analyses of girls' and boys' data are presented in Tables 2 and 3. Using only girls' data, there were six statistically significant correlations. Three of them were significant with the Bonferroni correction, including one cross-source correlation: a negative association between parents' ratings of family conflict and girls' perceived self-competence. Using boys' data, there were three statistically significant correlations and none with the Bonferroni correction. Comparisons of the individual correlation coefficients revealed only one significant sex difference. The parent mea-

Table 3

Pearson Correlations Between Conflict and Psychological Adjustment for Boys Only

Variable	<i>n</i>	1	2	3	4	5	6	7	8
Family conflict measures									
1. Child's report of family conflict	32	—							
2. Parents' average report of family conflict	32	.37*	—						
Marital discord measures									
3. Parents' average report of marital satisfaction	32	-.31	-.50*	—					
4. Parents' average report of verbal aggression with spouse	32	.39*	.52*	-.47*	—				
Child adjustment measures									
5. Child's perceived self-competence	32	-.44*	.01	.12	-.02	—			
6. Parents' average report of internalizing behavior	32	-.01	.15	.05	.04	.14	—		
7. Parents' average report of externalizing behavior	32	.25	.47*	-.18	.22	.12	.68**	—	
8. Teacher's report of behavior problems	32	.11	.36*	-.33	.10	-.02	-.10	.26	—

* $p < .05$. ** $p < .05$ with Bonferroni correction.

sure of family conflict was correlated with girls' perceived self-competence ($r = -.59, p \leq .01$), but not with boys' self-competence ($r = -.01, z = 2.61, p \leq .05$).¹

The second hypothesis predicted that child adjustment would be more strongly associated with family conflict than with marital conflict. There were two measures of marital discord in this study: parents' averaged reports of marital satisfaction and their averaged reports of verbal aggression. In a multivariate regression analysis, we simultaneously regressed all four child adjustment measures on the two marital discord variables, revealing a nonsignificant association (Wilks's lambda = .97), $F(4, 62) = 0.42$ (the overall canonical correlation was .16; $r_s = .15$ and .21 for boys and girls, respectively). As shown in Table 1, all eight of the correlations between the two measures of marital discord (i.e., satisfaction and aggression) and four measures of child adjustment were fairly low (correlations ranged from .04 to .29), and only one reached statistical significance. Parents who reported low levels of marital satisfaction also described their child as having more externalizing behavior problems. There were no significant sex differences in the pattern of correlations.

Additional analyses directly compared the two marital discord variables with the two family conflict measures (i.e., children's reports and

parents' averaged reports) as correlates of child adjustment.² First, all four adjustment variables

¹ The significantly stronger association between parents' reports of family conflict and lowered perceived self-competence in girls occurred for three of the six domain-specific subscales on Harter's (1985) Self-Perception Profile for Children: Perceptions of Scholastic Competence, Physical Appearance, and Global Self-Worth. On the other hand, there were no sex differences found for the remaining subscales (i.e., Social Competence, Athletic Competence, and Behavioral Conduct).

² The family conflict measure included two items assessing physical aggression (i.e., "Family members sometimes hit each other," "Family members sometimes get so upset they throw things"). Because the Physical Aggression subscale was omitted from the measure of marital aggression (i.e., the Conflict Tactics Scale), a direct comparison of these two variables may be problematic. Results suggesting the relative strength of family conflict could reflect the importance of the two physical aggression items rather than the significance of a general family climate of conflict. We therefore constructed an abbreviated family conflict scale omitting the two physical aggression items. The abbreviated scale was highly correlated with the full family conflict scale ($r_s = .97$ and .96, $ps < .001$, for children and average parent ratings, respectively). We then recomputed all of the analyses presented in this article using the abbreviated family conflict scale and found no changes in the results. Therefore, the physical aggression items on the family conflict scale do not account for the results presented in this section or in any other section of this article.

Table 4

Changes in R² Associated With Parents' Reports of Family Conflict and Marital Discord as Predictors of Child Adjustment

Child adjustment outcome	Total R ^{2a}	R ² change: Parents' reports of family conflict ^b	R ² change: Parents' reports of marital discord ^c
Self-competence	.13*	.10**	.04
Parents' ratings of internalizing behavior problems	.11	.10**	.01
Parents' ratings of externalizing behavior problems	.30***	.22***	.003
Teacher-reported behavior problems	.13*	.08**	.01

^a Total variance accounted for by all three predictor variables (i.e., parents' reports of family conflict and the two marital discord variables [parents' reports of marital satisfaction and marital aggression]). ^b Unique variance accounted for by the parents' reports of family conflict after controlling for the two marital discord variables. ^c Unique variance accounted for by the two marital discord variables after controlling for the parents' reports of family conflict.

* $p < .05$. ** $p < .01$. *** $p < .001$.

were regressed onto the four conflict variables (i.e., two measures of family conflict and two measures of marital discord), revealing a significant canonical correlation of .43 (Wilks's lambda = .82), $F(4, 62) = 3.44$, $p \leq .05$ ($r_s = .45$ and $.52$ for boys and girls, respectively). The independent contributions of each of the two types of conflict variables (i.e., marital discord and family conflict) were examined next. The two family conflict variables remained significantly associated with child adjustment problems after the level of marital discord had been controlled (Wilks's lambda = .56), $F(4, 61) = 12.0$, $p \leq .001$ (the overall canonical correlation was .66; $r_s = .61$ and $.76$ for boys and girls, respectively). By contrast, marital discord was not associated with child adjustment after controlling for family conflict (Wilks's lambda = .95), $F(4, 61) = 0.77$ (the overall canonical correlation was .22; $r_s = .24$ and $.21$ for boys and girls, respectively).

Hierarchical multiple regressions were also computed in which each of the four child adjustment outcome measures were separately regressed onto a set of three variables: a single family conflict variable (either the parents' rating or the child's rating) and the two marital discord variables. In the first group of regressions, we used parents' ratings as the measure of family conflict. The results are presented in Table 4. Even after controlling for the marital variables, parents' descriptions of a climate of conflict in the home remained significantly associated with all four measures of child adjustment, including the two cross-source associations with children's perceived self-competence

and teachers' reports of behavior problems. The marital discord variables, on the other hand, did not make a unique contribution to any of the adjustment measures.

Children's perceptions of family conflict were used in the second group of regressions. The results are presented in Table 5. After controlling for parents' reports of marital discord, we found that children's descriptions of a climate of conflict in the home remained significantly associated with the two measures of child adjustment that were significant in the zero-order correlations: perceived self-competence and parents' ratings of externalizing behavior problems. Again, the two marital discord variables did not make a unique contribution to any of the adjustment outcomes.

In sum, although family conflict was a reliable correlate of child maladjustment, marital satisfaction and marital aggression were not. Moreover, family conflict was correlated with child adjustment independent of the level of discord in the parents' marriage and in the parent-child relationship.

Discussion

The evidence supported the two hypotheses about the relation between interpersonal conflict at home and child adjustment. First, preadolescent children in families that were characterized by more open expressions of anger and conflict appeared to be less well adjusted. In particular, they were more likely to have poor perceptions of themselves and to display externalizing be-

Table 5
Changes in R² Associated With Children's Reports of Family Conflict and Parents' Reports of Marital Discord as Predictors of Child Adjustment

Child adjustment outcome	Total R ^{2a}	R ² change: Children's reports of family conflict ^b	R ² change: Parents' reports of marital discord ^c
Self-competence	.34***	.31***	.002
Parents' reports of internalizing behavior problems	.06	.05	.01
Parents' reports of externalizing behavior problems	.18**	.09**	.06
Teacher-reported behavior problems	.05	.001	.05

^a Total variance accounted for by all three predictor variables (i.e., children's reports of family conflict and the two marital discord variables [parents' reports of marital satisfaction and marital aggression]). ^b Unique variance accounted for by the children's reports of family conflict after controlling for the two marital discord variables. ^c Unique variance accounted for by the two marital discord variables after controlling for the children's reports of family conflict.

* $p < .05$. ** $p < .01$. *** $p < .001$.

havior problems at home. Findings from cross-sectional and longitudinal research with adolescents was thereby replicated in our sample of 8–11-year-old preadolescents.

The link between family conflict and child maladjustment appeared to be fairly robust. For example, analyses that controlled for a negative emotional tone in the parent–child relationship suggested that the family conflict variable was not simply a proxy for aversive parent–child interactions. Of course, we were not able to determine the extent to which children's behavior problems contributed to perceptions of anger and aggression in the family. Although our primary interest was in child adjustment as an outcome of exposure to interpersonal conflict at home, we are mindful of the significant role that children play in shaping negative family interactions (Christensen, Phillips, Glasgow, & Johnson, 1983).

The cross-source correlations also provided convincing support for the first hypothesis. Children's descriptions of family conflict were associated with parents' reports of externalizing behavior problems, and parents' descriptions of family conflict were associated with both teachers' reports of problems at school and children's perceived self-competence. Although not all of the cross-source correlations survived the Bonferroni correction, there was a reliable correlation between parents' reports of family conflict and girls' perceptions of self-competence.

The stronger support among girls for the first hypothesis, at least with regard to their self-perceptions, is consistent with other research indicating that a family emotional climate of anger

has a greater impact on daughters' emotional development (Eisenberg et al., 1992). The effects of family conflict on girls clearly warrant further investigation. Evidence that daughters are more likely than sons to intervene in sibling–sibling and parent–sibling conflicts suggests one promising avenue for exploration (Vuchinich et al., 1988).

As expected, family conflict was a much stronger correlate of child adjustment than was marital discord. The generally nonsignificant association in our study between measures of marital discord and child adjustment is not unusual. According to a recent review, fewer than half of the correlations between interparental conflict and child behavior problems are significant in a majority of studies (Reid & Crisafulli, 1990). Multiple regressions using parents' descriptions of anger in both their marriage and their family as predictors of child adjustment provided revealing comparisons of family and marital conflict. On the one hand, the parents' descriptions of a conflictive climate at home was independently associated with all four child adjustment measures. Their report of discord in their marriage, on the other hand, was not associated with child maladjustment in any of the analyses. Unfortunately, because we did not include children's reports of marital conflict, we were unable to directly compare children's perceptions of marital and family conflict.

We certainly do not wish to make the argument that marital conflict is not detrimental to children. Our data do suggest, however, that in a nonclinic sample general behavioral norms in the family for acceptable ways of handling anger

and conflict may be more significant for child adjustment than is discord within the parents' marriage. For example, parents in a troubled marriage may be able to keep their children from observing their conflicts, thereby shielding them from the harmful effects of open marital discord. This possibility was suggested both by the nonsignificant association between marital discord and child adjustment and by the pattern of correlations between parents' and children's perceptions of the family. As expected, parents' reports of discord in their marriage were correlated with their descriptions of a conflictive climate in their home, and parents and children agreed in their ratings of family conflict. However, children's perceptions of conflict at home were independent of their parents' reports of marital discord.

To accurately identify the effects of marital conflict on children's psychological adjustment, it seems critical to assess both the extent to which (a) a child actually observes marital disputes and (b) open expressions of anger and aggression are part of the general social climate in the home. The significant correlations between parents' ratings of family conflict and their ratings of marital problems (on the basis of measures that are used frequently in this field) highlight the need to assess both dimensions of family life. When parents describe high levels of interparental discord, the reported anger and aggression is not necessarily a characteristic of the marital relationship alone. The emphasis on marital conflict in the literature might have masked the effects of family systems variables and limited our understanding of the ways in which anger and conflict at home affect children.

The need for a more systematic follow-up to this study is clear. For example, during the interviews, many children indicated that they were responding to the family conflict items with sibling conflict in mind. Furman and Buhrmester (1985) similarly found that children reported more conflict with siblings than with parents. It is important to understand how marital, parent-child, and sibling conflicts contribute to family norms for expressions of anger and aggression and how these different categories of family conflict influence important developmental outcomes.

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Received December 19, 1992

Revision received May 13, 1993

Accepted May 27, 1993 ■