

Dimensions of Family Conflict and Their Influence on Child and Adolescent Adjustment

BY: Alan C. Acock, and [David H. Demo](#)

Acock, Alan C., and David H. Demo. (1999). Dimensions of family conflict and their influence on child and adolescent adjustment. *Sociological Inquiry*, 69, 641-658.

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Abstract:

Using the first (1987-1988) and second (1992-1994) waves of the National Survey of Families and Households, this study examines the concurrent and longitudinal influences of interparental conflict and parent-child conflict on child and adolescent adjustment. Analyses focus on 542 intact families, each with a randomly selected focal child aged 5 to 11 at time 1 and aged 10 to 17 at time 2. Results indicate that both parent-child and parent-adolescent conflict are critical predictors of children's and adolescents' socioemotional adjustment. Interparental conflict, by contrast, is less important for adjustment in middle and late childhood as well as in adolescence. The findings extend previous research by suggesting that the salience and threat of interparental conflict subside as children make the transition into adolescence.

Article:

Researchers studying adolescence recognize the influence of parents in socializing their teenage children, particularly parents' role in transmitting values and fostering their children's development of self and identity. Less understood are the mechanisms through which family relationships influence adolescent adjustment, the direction and magnitude of such effects, and the degree to which conflicts between parents and adolescents may inhibit adolescent well-being. It is commonly argued that high levels of family conflict contribute to youth behavior problems (see review by Amato 1993), but typically investigators do not distinguish between interparental conflict, parent-adolescent conflict, and other forms of family conflict.

Recent investigations provide consistent evidence that interparental conflict (usually studied as marital conflict) has deleterious consequences for adolescent adjustment (see reviews by Buehler, Anthony, Krishnakumar, Stone, Gerard, and Pemberton 1997; Cummings and Davies 1994; Grych and Fincham 1990), but parent-adolescent conflict typically is not examined in studies of interparental conflict. As a result, we do not know how these two forms of family conflict are related, nor do we know how they influence child and adolescent adjustment. It is possible, for example, that the effects of interparental conflict on adolescent adjustment have been exaggerated or that they are largely indirect, operating through increased strain and conflict in the parent-adolescent relationship (Harold, Fincham, Osborne, and Conger 1997). Two objectives of the present study are to examine the contemporaneous and longitudinal influences of interparental relations and parent-adolescent relations on each other and to assess their mutual role in shaping development and well-being during the transition from late childhood into adolescence.

CONFLICT IN FAMILIES WITH CHILDREN AND ADOLESCENTS

Although not widely studied by family sociologists, conflict between parents and children is a routine aspect of family life, it is best understood as a process, and it has both positive and negative consequences (Farrington and Chertok 1993). Parent-child conflict also appears to be widespread, with disagreements occurring regularly in most families, especially when children are in mid-adolescence (Montemayor 1986). Until recently and largely due to the influence of psychoanalytic and clinical perspectives (e.g., Hall 1904; Freud 1958), it was popular to characterize adolescence as a period of storm and stress.

Recent evidence challenges this view, however (Dornbusch 1989; Gecas and Seff 1990). Studies show that conflicts between parents and adolescents tend to be minor and to concern mundane, everyday issues more than substantive ones (Barber 1994; Collins 1990). One reason that conflicts are not more frequent is that parents and children, especially adolescents, spend very little time together, typically no more than one hour per day (Montemayor 1982). From a symbolic interactionist perspective, if we are to understand the consequences of parent-adolescent conflict for adolescent adjustment, we must view the conflicts from the adolescents' vantage point and consider how they are interpreting those events. In this regard, it is significant that parents and adolescents agree less than half the time on whether a conflict has even occurred (Montemayor and Hanson 1985) and that adolescents perceive their conflicts with parents to be more frequent and severe than parents do (Montemayor 1986; Smetana 1989). We would thus expect adolescents' adjustment to correlate more strongly with their own perceptions of family events than with parents' perceptions (Demo, Small, and Savin-Williams 1987; Gecas and Schwalbe 1986).

INTERPARENTAL CONFLICT AND ADOLESCENT ADJUSTMENT

Over the past two decades, consistent evidence has accumulated indicating that high levels of marital discord have a negative impact on children's social and psychological adjustment (Emery 1982; Grych and Fincham 1990). Studies suggest that the effects on children are observable in both internalizing (anxiety, depression, withdrawal, low self-esteem) and externalizing (aggression, hyperactivity, delinquency, substance abuse) problems (Buehler et al. 1997; Emery, Fincham, and Cummings 1992). Although the magnitude of observed effects varies across studies, the relationship tends to be robust. A meta-analysis of sixty-eight studies conducted by Buehler et al. (1997) reports an average effect size of .32.

In what Fincham (1994) has termed "second generation research," investigators have attempted to identify the actual pathways through which parental conflict produces reactions in children. Although these pathways are still not clearly understood, several mechanisms have been suggested. For example, parental displays of anger arouse children, who may develop externalizing problems through observing and modeling their parents' verbal and physical aggression (Cummings and Davies 1994). Children are often drawn into parental conflicts, feel pressured to take sides or to resolve the disagreement, and blame themselves for their parents' arguments (Grych and Fincham 1993). These processes would be expected to contribute to children experiencing internalizing problems. However, we do not know if these processes extend to adolescents. Self-blame may be more likely among younger children than adolescents because the former are more egocentric (Grych and Fincham 1990).

Previous research examining the mechanisms through which interparental conflict influences adolescent adjustment has been limited in two other respects. First, most studies have not examined both direct and indirect effects, preventing an assessment of the relationship between interparental conflict and parent-child conflict as well as an assessment of their independent and shared influences on adolescent adjustment. Second, studies have relied heavily on adolescents' perceptions of marital conflict (Harold et al. 1997). While adolescent perceptions are important, particularly for understanding adolescent adjustment, shared method variance involved in correlations between adolescents' reports of inter-parental conflict and adolescents' self-reported adjustment may overestimate the magnitude of the relationship between marital conflict and adolescent outcomes.

MOTHERS' AND FATHERS' RELATIONSHIPS WITH ADOLESCENTS

Researchers studying families with adolescents have devoted little attention to variations in parent-adolescent relationships by parents' gender (Gecas and Seff 1990). Still, there is evidence that mothers tend to be more involved than fathers in the daily lives of adolescents (Larson and Richards 1994; Montemayor 1986), that fathers do much of the directive parenting but far less of the attentive parenting than mothers (Bronstein 1988; Larson and Richards 1994), and that both sons and daughters perceive their fathers as more powerful and more autocratic, but less connected and "less able to listen to what adolescents feel" (Larson and Richards 1994, p. 186).

A number of studies report that adolescents experience greater conflict with their mothers than their fathers, mainly because fathers are less involved in their children's lives (Larson and Richards 1994; Montemayor and Hanson 1985; Steinberg 1987). Perhaps because of fathers' greater detachment, stronger associations have been observed between mothers' reports of interparental conflict and youth problem behavior than between fathers' reports and youth adjustment (Buehler et al. 1997). The influence of father-adolescent relationships is easily underestimated, however, with some research indicating that adolescent maladjustment was strongly related to fathers' use of verbal and physical aggression (Kempton, Thomas, and Forehand 1989).

PARENT-CHILD RELATIONS DURING CHILDHOOD AND ADOLESCENCE

As children mature and move through the transition from late childhood into adolescence, the amount of time parents spend with children decreases. In conjunction with less time spent together, adolescents interrupt their parents more often and defer less frequently, and parent-child conflict increases (Paikoff and Brooks-Gunn 1991; Steinberg 1981). Unfortunately, however, most research on changes in parent-child relationships during the transition to adolescence has relied on small, predominantly White, middle-class samples (Paikoff and Brooks-Gunn 1991). Further, there have been few attempts to investigate parent-child conflict longitudinally or to examine possible reciprocal effects of youth behavior problems on parent-child conflict or interparental conflict (Ambert 1997; Gecas and Seff 1990). Yet there is some evidence that youth maladjustment influences parenting behaviors. Ambert (1997) notes that adolescent disobedience, disrespect, talking back to parents, and general noncompliance leads to more forceful parenting. Similarly, Patterson, Reid, and Dishion (1992) observe that rebellious, antisocial children often undermine parents' attempts to monitor and discipline while reinforcing parental withdrawal and lenience. In a rare study following families with adolescents over a three-year period, Simons, Whitbeck, Beaman, and Conger (1994) found that adolescents externalizing problems (but not internalizing behaviors) predicted subsequent problems with mothers' monitoring and disciplining. Thus, we might expect to find that child maladjustment at time 1 will be related to higher levels of parent-adolescent conflict at time 2.

Youth behavior problems also may increase the frequency of interparental conflict. To the degree that children and adolescents are anxious, depressed, aggressive, or otherwise troubled, it is reasonable to expect that interparental differences in parenting values, philosophies, and behaviors will be heightened. Such effects may be indirect in that youth maladjustment increases parent-child (and parent-adolescent) conflict which, in turn, aggravates disagreements and tensions between parents. However, there have been very few attempts to causally model these relationships using either cross-sectional or longitudinal data (Harold et al. 1997), and thus we know little about the directionality or pathways involved in these relationships. Further, without longitudinal inquiries, we cannot assess whether interparental and parent-child conflict are stable, whether their effects on children's adjustment are stronger in childhood or adolescence, or whether the effects are immediate, delayed, temporary, or enduring. The present study uses two waves of a large, nationally representative sample to examine the relations between interparental conflict, parent-child conflict, and child (time 1) and adolescent (time 2) well-being.

CONCEPTUAL MODEL AND RESEARCH QUESTIONS

Figure 1 presents a conceptual model. The model involves parent-child conflict and interparental conflict measured twice, once when the child was 5 to 11 and again when the child was an adolescent (11 to 17). The child's adjustment was also measured twice, first when the child was 5 to 11 and then when he/she became an adolescent (11 to 17). Based on previous research, we posit that both parent-child conflict and marital conflict directly influence adjustment for the 5- to 11-year-old child. Similarly, both parent-child conflict and interparental conflict directly influence adolescent adjustment.

We also expect there to be moderate stability in all three variables. Specifically, we expect parent-child conflict to be stable from late childhood to adolescence, we expect interparental conflict to be stable during this period, and we expect child/adolescent adjustment to be stable. In other words, adjustment in childhood should predict subsequent adjustment in adolescence. Simons, Whitbeck, Beaman, and Conger (1994) report from their panel study that both internalizing and externalizing problems are quite stable during adolescence.

In addition, we expect there to be cross-lagged effects with marital conflict at the first wave being a source of subsequent marital conflict, and marital

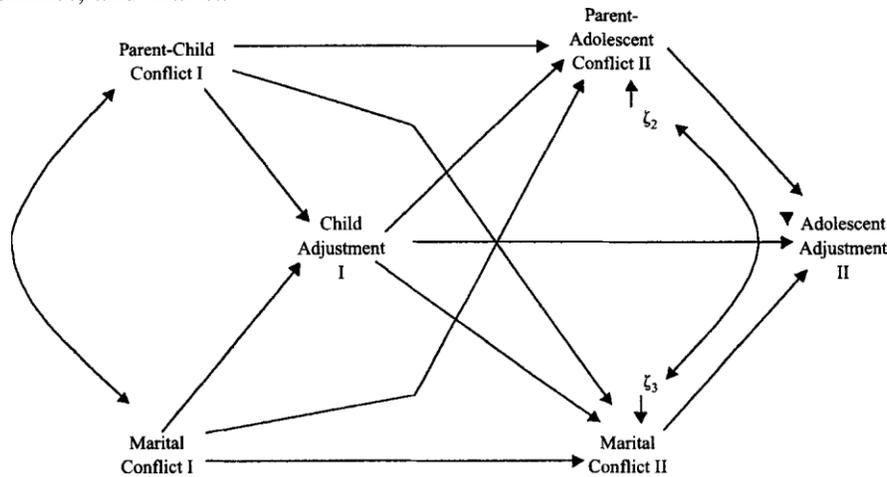


Fig. 1. Parent-Child Conflict, Marital Conflict, Child Adjustment, and Adolescent Adjustment at Two Waves

conflict at the first wave being a source of subsequent parent-adolescent conflict. Both of these are direct effects. In our model the adjustment of the late-childhood focal child plays a pivotal role. It is not only directly influenced by parent-child and marital conflict, it also directly influences subsequent parent-adolescent and marital conflict. Translated, this means that part of the stability of conflict may be explained by the effects of child adjustment. Thus, the child's adjustment is not only dependent on conflict at the first wave but is also a cause of conflict at the second wave.

The literature review and our conceptual model lead us to a series of research questions:

1. Are the observed variables (parent-child conflict, interparental conflict, and child well-being) stable over time?
2. Is parent-child conflict related to adverse child outcomes at time 1?
3. Is marital conflict related to adverse child outcomes at time 1?
4. Does parent-child conflict at time 1 contribute to marital conflict at time 2, when the child is an adolescent?
5. Does marital conflict at time 1 contribute to parent-child conflict at time 2, when the child is an adolescent?
6. Do child outcomes influence subsequent parent-child conflict?
7. Do child outcomes influence subsequent marital conflict?
8. Does parent-child conflict at time 2 lead to adverse child outcomes at time 2, when the child is an adolescent?
9. Does marital conflict at time 2 lead to adverse child outcomes at time 2, when the child is an adolescent?
10. Are there indirect effects of time 1 parent-child conflict on time 2 variables (parent-child conflict, marital conflict, and child adjustment)?
11. Are there indirect effects of time 1 marital conflict on time 2 variables (parent-child conflict, marital conflict, and child adjustment)?
12. Is there an indirect effect of child adjustment on adolescent adjustment?

METHODS

The National Survey of Families and Households was used in this analysis. We included both the first wave, collected from 1987 to 1988 and the second wave, collected from 1992 to 1994.(1) To ensure that we were examining the same parents at both waves of data collection, we restricted the sample to families that were intact at both time periods and were headed by parents in their first marriage. In the first wave a series of questions was asked about the adjustment of a randomly selected focal child who was 5 to 11 at the time of the interview. It is possible for families to have a child in this age range, but to be excluded because the randomly

selected focal child was younger or older. We excluded families where the parent had a response of "inapplicable" to all of these items. While the NSFH dataset had 13,008 interviews in the first wave and 10,008 in the second wave, our restrictions reduced the sample size to 542 families. These families were subsequently divided into 313 families in which the mother was the primary respondent and 229 families in which the father was the primary respondent. We used only a single parent from each family to ensure that the data for mothers and fathers were from independent samples. All of our data are from responses of the primary respondent at the first and second waves.

The use of the National Survey of Families and Households provides a nationally representative sample. As noted above, much of the research on the effects of family conflict on children has been limited to predominantly White, middle-class families (Paikoff and Brooks-Gunn 1991). The NSFH data provide a much broader representation of families, including an oversampling of minority families.

The study involves six variables: Marital Conflict at Wave I, Marital Conflict at Wave II, Parent-Child Conflict at Wave I, Parent-Child Conflict at Wave II, Child Adjustment at Wave I, and Adolescent Adjustment at Wave II.

Marital Conflict at Wave I was measured using six items (E706a, E706b, E706c, E706d, E706g, and E707c in the NSFH1 labeling system). The first five of these items concerned areas in which couples disagree. The areas are household tasks, money, time spent together, sex, and children. The response options ranged from 1 for never to 6 for almost every day. The sixth item concerned how often the couple argued heatedly or shouted at each other. Response options ranged from 1 for never to 5 for always. A single principal component emerged for both mothers and fathers. The loadings for fathers are .77, .82, .80, .73, .56, and .69 for the six items, respectively. For mothers the loadings are .68, .75, .75, .76, .65, and .52. The alpha reliability for this scale is .83 for fathers and .78 for mothers.

Marital Conflict at Wave II was measured by the same set of items (MT613a, MT613b, MT613c, MT613d, MT613f, and MT614c in the NSFH2 labeling system). These items also produced a single principal component for both mothers and fathers. The loadings for fathers are .76, .69, .70, .74, .68, and .57, respectively, and the loadings for the mothers are .73, .70, .69, .71, .62, and .69. The alphas are .78 for fathers and .78 for mothers. Parent-Child Conflict at Wave I had a limited pool of items. We included two items (M285 and M287 in the NSFH1 labeling system). The first item asked the parent how often he or she argued or had a lot of difficulty with the 5- to 11-yearold focal child in the thirty days preceding the interview. Response options ranged from 1 for never to 6 for almost every day. The second question asked the parent how often his or her spouse had this problem. We included both of these items because they were highly intercorrelated, $r = .79$ for fathers and .73 for mothers.

Parent-Child Conflict at Wave II had a much larger pool of items, perhaps reflecting the sometimes greater scope of parent-child conflict when the child is an adolescent. We used a six-item scale (m179, m180, m181, m182, m183, and mqr701 f using NSFH2's labels). The first five items asked the parent how often he or she disagrees with the focal child about friends, housework, school, family, and money. Possible answers ranged from 1 for never to 6 for almost daily. The sixth item asked the parent whether the focal child argues too much. Possible answers ranged from 1 for never at all to 6 for more than once a week. These six items resulted in a single principal component for fathers and a dominant principal component for mothers (a second component had an eigen value of 1.05). The loadings for fathers are .51, .71, .71, .67, .49, and .62. The loadings for mothers are .56, .72, .60, .61, .64, and .54.

Child Adjustment I and II were difficult to measure. A much larger series of items was asked in NSFH2 than in NSFH I, but we wanted to be as consistent as practical. We selected four items that were asked at both waves of the panel survey (M305B, M305D, M305G, and M305H, and MQR702E, MQR702D, MQR701I, and MQR701J). The items asked the parent if the child is unhappy or depressed, loses his or her temper easily, is cheerful and happy, and if the child bullies or is cruel to other children. Response options ranged from 1 for

often to 3 for not true in the first wave and the reverse of this in the second wave. Items were recoded so a higher response reflected better adjustment. Both sets formed a strong first principal component with loadings of .61, .70, .69, and .49 for the first wave, and .64, .72, .79, .76 for the second wave. However, neither wave produced a reliable scale. For this reason we kept the four items as individual indicators. The principal component analysis indicates they are related and they have considerable face validity.

Missing values are problematic in all research and especially in panel studies. Although we had 229 eligible fathers, the listwise valid N is 202 fathers. The results are comparable for mothers. Of the 313 eligible mothers, the listwise valid N is 272 mothers. To minimize the loss of information and potential resulting bias (Acock 1997), we use the expectation maximization (EM) procedure to impute a covariance matrix (Schafer 1997).² Because we do not assume the missing values are missing at random (MAR), we included six "mechanism" variables, the age of the youngest child, the respondent's education, the age of the focal child, the gender of the focal child, the age of the respondent, and whether the respondent was in the primary or over sample.

The method of analysis involves estimating the structural equation model that appears in Figure 1. LISREL 8.2 was used for estimating the model. Not shown in the figure is the measurement model. The measurement error in parent- child conflict and marital conflict at both waves was fixed to a value of (1 - a) times the variance of the scale (Joreskog and Sorbom 1993). This allows for a conservative estimate of the measurement error without making the model excessively complex for the sample size. Because of the problems measuring child and adolescent adjustment, we used four items as indicators of Adjustment I and Adjustment II. Since parallel wording was used for these items it was reasonable to expect some of the individual errors to be correlated across time.

The initial model was fit on a sample of mothers and an independent sample of fathers, simultaneously. The chi-square (90) = 182.39, $p < .001$ (See Table 1). The measures of goodness of fit were in the adequate range (RMSEA = .057, SRMR = .045, GFI = .95, NNFI = .87). However, we speculated that the use of parallel items to indicate child and adolescent adjustment suggested that some of their respective errors might be correlated. We could improve the fit of the model by correlating the errors of the first three indicators of child adjustment with the corresponding errors in the first three indicators of adolescent adjustment. Doing so resulted in a chi-square (84) = 130.98. As shown in Table 1, this represents a significant improvement in the fit of the model. The difference in chi-squares is 51.41, which has six degrees of freedom and a $p < .001$.

Before comparing the structural effects for fathers and mothers, we tested to see if the measurement models were tau equivalent. This means that the loadings are invariant for fathers and mothers. Imposing this restriction on the model resulted in a chi-square (92) = 141.67. The difference between this model and

Table 1
Comparison of Mothers' and Fathers' Models

Model	Df	χ^2	P	χ^2 Diff	Df Diff	P Diff
1. Base, no correlated errors	90	182.39	.001			
2. Same, plus correlated three errors	84	130.98	.001	51.41 ^a	6	.001
3. Same as 2, plus measurement model invariant	92	141.67	.001	10.64 ^b	8	.220
4. Same as 3, plus structural model invariant	103	155.93	.001	14.26 ^c	11	.219

^aModel 2 vs. Model 1

^bModel 3 vs. Model 2

^cModel 4 vs. Model 3

the model without the tau equivalent measurement constraint has a chi-square (8) = 10.69 and is not significant, $p = .220$ (see Table 1). This means we can compare the structural models for mothers and fathers.

The fourth model constrained the structural models to be identical for mothers and fathers (Gamma and Beta were forced to be invariant). These constraints resulted in a chi-square (103) = 155.93. The difference in chi-squares for this model and the model that does not impose this constraint has a chi-square (11) = 14.26, $p = .22$. Because the models for mothers and fathers are invariant, we were able to combine the sample of mothers and fathers. This does cause us to reject differences between mothers and fathers, but it simplifies the results because we can impose the same solution on mothers and fathers.

RESULTS

The model in Figure 1 was applied to the combined sample of mothers and fathers. There are two ways of examining the fit of the model. The chi-square (42) = 86.54; $p < .001$ was statistically significant, meaning the model was not a perfect fit to the data. The second approach to assessing how well the model fits involves measures of the "goodness of fit." All of these measures indicate that although the model is not perfect, it provides an excellent fit to the data. The RMSEA = .043 (90% Confidence Interval is .030 to .057) and a value below .08 is considered an acceptable fit. The standardized root mean square residual is .037. The Goodness of Fit Index (GFI) is .97 and the Adjusted Goodness of Fit Index is .95. The Normed Fit Index (NFI) is .93 and the Non-Normed Fit Index (NNFI) is .94.

We will address each of the twelve research questions. Table 2 presents the direct, indirect, and total effects as well as the bivariate correlations for each of the relationships in Figure 1. The first question concerns stability of the three variables: marital conflict, parent-child conflict, and child/adolescent adjustment. Marital conflict shows a high level of stability. Table 2 shows a strong correlation ($r = .56$) between marital conflict when the child was 5 to 11 and marital conflict when the child was 11 to 17. The direct effect, sometimes called the stability coefficient, is .58; $p < .001$. By contrast, although the correlation between parent-child conflict and parent-adolescent conflict is substantial, $r = .42$, there is little evidence of direct stability of parent-child conflict. The direct effect or stability coefficient is .05; ns. It is noteworthy that the stability coefficients are not significant although there is a substantial correlation over time for both variables. We will see below, in addressing question 10, that this inconsistency is the result of a strong indirect effect. Although the correlation between child adjustment and adolescent adjustment is strong, $r = .47$, the stability coefficient in Table 2 is very low, .06; ns. This is also due to a strong indirect effect that will be discussed below.

Table 2
Structural Equation Estimates for Mothers and Fathers: Standardized Direct, Indirect, and Total Effects

Relationship	Direct Effect	Indirect Effect	Total Effect	Correlation
PC1 → PC2	.05 ^{ns}	.27**	.32***	.42
PC1 → Adjust1	-.62***	—	-.62***	.69
PC1 → MC2	-.06 ^{ns}	.00 ^{ns}	-.06 ^{ns}	.12
PC1 → Adjust2	—	-.29***	-.29***	-.35
MC1 → PC2	.26***	.09*	.34***	.44
MC1 → Adjust1	-.21**	—	-.21**	-.40
MC1 → MC2	.58***	.00 ^{ns}	.58***	.56
MC1 → Adjust2	—	-.19***	-.19***	-.28
Adjust1 → PC2	-.43***	—	-.43**	-.56
Adjust1 → MC2	-.00 ^{ns}	—	.00 ^{ns}	-.19
Adjust1 → Adjust2	.06 ^{ns}	.34**	.39***	.47
PC2 → Adjust2	-.79***	—	-.79***	-.75
MC2 → Adjust2	.16*	—	.16*	-.24

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

PC1 is parent-child conflict, PC2 is parent-adolescent conflict, Adjust1 is child's adjustment, Adjust2 is adolescent's adjustment, MC1 is marital conflict at time 1, and MC2 is marital conflict at time 2.

The second and third questions concern the consequences of conflict on children aged 5 to 11. Both parent-child conflict (— .62, $p < .001$) and marital conflict (— .21, $p < .01$) directly reduce the adjustment level of the child, although parent-child conflict has a much stronger effect than marital conflict. The model explains 51% of the variance in child well-being, relying solely on parent-child and interparental conflict.

The fourth and fifth questions concern cross-lagged effects of parent-child and marital conflict at times 1 and 2. At issue is the long-term consequence of one type of conflict on the other type. Does early parent-child conflict lead to greater interparental conflict when the child is an adolescent? Does early marital conflict lead to later parent-adolescent conflict? Parent-child conflict does not appear to directly influence subsequent marital conflict (— .06, ns), but marital conflict at time 1 does directly influence subsequent parent-adolescent conflict (.26, $p < .001$). We caution, however, that this is a very limited test of the effect of parent-child conflict on later marital conflict because we are restricting attention to a single, focal child in each family.

Questions 6 and 7 examine the effects of child adjustment at time 1 on subsequent parent-child and marital conflict. As expected, child adjustment problems when the child is 5 to 11 appear to have a strong effect on parent-adolescent conflict (— .43, $p < .001$). Given that approximately five years intervened between these two measures, this is a strong effect. Thus, in addition to parent-child conflict influencing child adjustment, child adjustment, in turn, is influencing parent-adolescent conflict. By contrast, parent-child conflict has no effect on subsequent interparental conflict. As with hypothesis 5, this finding is limited by having the reported child adjustment apply to a single child.

Questions 8 and 9, like questions 2 and 3, concern the effects of parent-child conflict and interparental conflict on child adjustment. But there are two important differences. First, we are now concerned with when the focal child is an adolescent and second, the direct effects may be mitigated by direct and indirect effects that could not be estimated at time 1 (i.e., the stability effect of child adjustment and the indirect effects of time 1 conflict). The direct effect of parent-adolescent conflict on adolescent adjustment is extremely strong (— .79, $p < .001$). Although the correlation between marital conflict and adolescent adjustment is in the expected direction, $r =$

.24, the correlation is only moderate. More problematically, the direct effect of marital conflict on adolescent adjustment is weak (.16, $p < .05$) and is in the opposite direction of what we expected. To a considerable extent, this weak and inconsistent result reflects the much greater importance to the child of the parent-adolescent relationship than the marital relationship. It is also important to note that when the focal child was 5 to 11, marital conflict appeared to have a clearly negative effect on the child's adjustment, $r = -.40$, path = $-.21$, $p < .01$. It would seem that parents are salient to adolescents only in terms of their relationship to the adolescent, and that the parents' relationship to each other is somewhat peripheral. As the child expands his/her boundaries, the marital conflict becomes less salient. Primarily because of the importance of parent-child conflict, the model explains 58% of the variance in adolescent adjustment.

Questions 10 and 11 concern the indirect effects of parent-child and marital conflict at time 1 on parent-child conflict, marital conflict, and adolescent adjustment. Although the direct stability coefficient for parent-child conflict was .00, the variables were moderately correlated, $r = .42$. Table 2 shows that there is a strong indirect effect of parent-child conflict on parent-adolescent conflict at time 2 (.27, $p < .01$). The mechanism for this is the child's adjustment. Parent-child conflict strongly relates to child adjustment and child adjustment strongly influences parent-adolescent conflict. Parent-child conflict at time 1 also has a moderate long term indirect effect on the child's adjustment when he or she is an adolescent. The indirect effect between parent-child conflict at time 1 and adolescent adjustment is $-.29$, $p < .001$. Parent-child conflict has no indirect effect on subsequent marital conflict.

Marital conflict at time 1 has a moderate long-term indirect effect on adolescent adjustment at time 2 ($-.19$, $p < .001$). This is especially important when we recall that marital conflict when the child is an adolescent does not have a negative direct effect on the adolescent's adjustment. Marital conflict at time 1 does not have an indirect effect on either parent-child conflict or marital conflict at time 2, but this needs to be balanced against the strong direct stability effect of marital conflict.

Question 12 examines the indirect effect of child adjustment on adolescent adjustment. While the direct stability coefficient for adjustment was not significant (.06, ns), the indirect effect through parent-child conflict is strong (.34, $p < .01$). Thus, the observed correlation between child adjustment and adolescent adjustment ($r = .47$) is largely explained by child adjustment problems leading to subsequent parent-adolescent conflict which, in turn, exacerbates the adolescent's adjustment problems.

DISCUSSION

This study was designed to examine several issues: the degree of stability characterizing parent-child conflict and interparental conflict during the transition from childhood into adolescence, the stability of children's socioemotional adjustment over a five-year period spanning ages 5 to 11 to 10 to 17, the strength of the association between interparental conflict and children's well-being during the transition into adolescence, and the influence of children's adjustment on parent-child and interparental relations. A social conflict perspective suggests that disagreements and tensions are basic and routine aspects of parent-child and interparental relations, that such conflicts are processual, and that they are both adaptive and detrimental (Farrington and Chertok 1993). Generally, our findings support this view in that the nature and frequency of parent-child and interparental conflict changes over time and the consequences of these conflicts, particularly conflicts proximate to parent-child relations, are deleterious to children's and adolescents' adjustment.

Our model explains 51% of the variance in child adjustment at the first wave and 58% of the variance in adolescent adjustment at the second wave. Parent-child conflict is a critical predictor of children's adjustment in late childhood and adolescence. It is the dominant variable in our model because it has a strong effect on both child and adolescent adjustment, and because the effects of both marital conflict and child adjustment at time 1 are mediated through parent-adolescent conflict at time 2 (as indirect effects). This is illustrated in Figure 2, which shows only the significant effects.

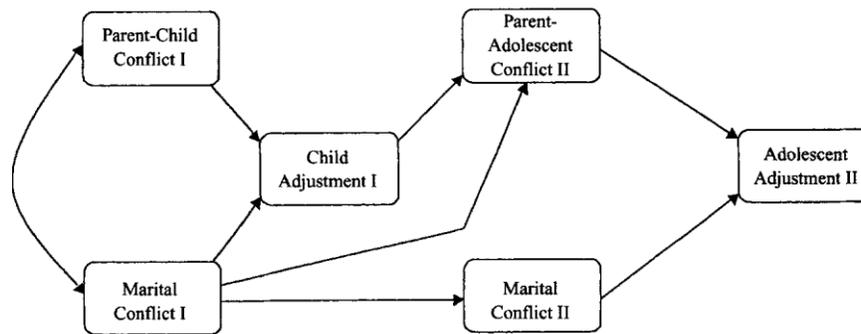


Fig. 2. Parent-Child Conflict, Marital Conflict, Child Adjustment, and Adolescent Adjustment: Significant Effects

In explaining children's adjustment, marital conflict is less predictive than parent-child conflict, and marital conflict becomes even less important as the child becomes an adolescent. This finding extends previous research in a number of ways. First, reviews of the literature on interparental conflict and youth adjustment suggest no consistent findings regarding a particular age at which children or adolescents are most vulnerable to parental conflict (Buehler et al. 1997; Cummings and Davies 1994; Grych and Fincham 1990). Previous studies, however, have relied on cross-sectional designs and have not simultaneously examined the influence of both interparental and parent-child conflict. In the current study we were able to model the relations among these variables over time and although we found a moderate correlation between marital conflict and adolescent adjustment, the direct effect was weak and in the opposite direction to what we hypothesized. This is important in that we have been able to highlight the much stronger effects of parent-child conflict relative to interparental conflict (for both children and adolescents), but it is also significant that the effects of marital conflict are less pronounced for adolescents than for younger children. Although further research is necessary to replicate these findings and to identify the adaptive and coping mechanisms adolescents may be using, our data cast doubt on the speculation that adolescents could actually be at greater risk due to longer exposure to interparental fighting (Cummings and Davies 1994). As Grych and Fincham (1990) suggested, it may be that adolescents are less likely than younger children to blame themselves for parental tensions and hostilities. Further evidence that marital conflict occurring during middle childhood may be particularly problematic for youth development is that we observed a moderate long-term indirect effect of marital conflict measured at the first wave on adolescent adjustment measured at the second wave. As adolescents mature and as they move increasingly into extrafamilial (especially peer) networks (Bell 1981; Youniss and Smollar 1985), interparental conflict may simply be less salient and threatening to them than it is to younger children. Their involvement in activities outside the family also means that they are not present to observe much of the interparental conflict that occurs. The family context continues to be influential, however, as adolescents' relationships with their parents remain powerful predictors of their socioemotional adjustment (Demo and Acock 1996).

Child adjustment in middle childhood also exerts a lagged influence on parent-adolescent conflict. Three of the four strongest effects in the model involve parent-child conflict causing child adjustment problems or child adjustment problems causing subsequent parent-adolescent conflict. This is important in that child adjustment serves as the primary mechanism for explaining the stability of parent-child conflict between the two waves of data. Although we do not measure reciprocal effects, our findings are consistent with the processual view that youth behavior problems undermine effective parenting and contribute to conflicts between parents and children, and that these conflicts, in turn, inhibit child adjustment and well-being (Ambert 1997; Patterson et al. 1992).

By contrast, interparental conflict appears to be a stable characteristic of families, at least among families that remain intact, and marital conflict is not shaped by the adolescent's well-being or the level of parent-child conflict. In other words, there is no lagged influence of parent-child conflict on subsequent marital conflict. Families with high parent-child conflict at the first wave are no more likely than families with low parent-child conflict to develop higher marital conflict by the second wave. However, marital conflict exerts a lagged

influence on subsequent parent-adolescent conflict. This lagged effect is both direct and indirect, mediated by the child's adjustment. These findings provide further evidence that substantial marital conflict when children are young has especially adverse consequences.

Although several interesting findings have been observed, a few cautions are in order. First, although it is advantageous to examine family processes longitudinally, it is difficult to interpret effects spanning a five-year period. In trying to understand the consequences for adolescents of parent-child conflict and interparental conflict during middle childhood, we must recognize that we have no data on the inevitable changes and vicissitudes in parent-child and interparental relationships at various points during this interval. It may also be that with a five-year follow-up, we missed significant effects of shorter duration. For example, in some cases where we observed weak or nonsignificant effects after 5 years, an assessment after 6 months, 1 year, or 2 years might have yielded stronger effects. For these reasons, we need to be particularly careful in speculating on the duration of the effects of marital conflict on children. Further theoretical and empirical work is also necessary to establish the directionality of observed effects. Another limitation of the present investigation is our reliance on families that remained intact over the course of the study. Whether the course and consequences of interparental and parent-child conflict are similar for children living in other family configurations remains a question for future research. But we have provided consistent evidence that for children living with first-married parents throughout our study, frequent disagreements with their parents and, to a lesser degree, frequent conflicts between their parents, provide formidable obstacles to healthy child and adolescent adjustment.

ENDNOTES

(1). The National Survey of Families and Households data is in the public domain. All data and documentation are available at <http://ssc.wisc.edu/nsfh>.

(2). The program NORM was used for this imputation, This is available at: <http://methcenter.psu.edu/software.html>.

REFERENCES

- Acock, Alan C, 1997. "Working with Missing Data." *Family Science Review* 10:76-102.
- Amato, Paul R, 1993. "Children's Adjustment to Divorce: Theories, Hypotheses, and Empirical Support." *Journal of Marriage and the Family* 55:22-38.
- Ambert, Anne-Marie. 1997, "A Critical Perspective on the Research on Parents and Adolescents: Implications for Research, Intervention, and Policy." Pp. 291-306 in *Parents and Adolescents in Changing Families*, edited by David H. Demo and Anne-Marie Ambert. Minneapolis, MN: National Council on Family Relations.
- Barber, Brian K. 1994. "Cultural, Family, and Personal Contexts of Parent-Adolescent Conflict," *Journal of Marriage and the Family* 56:375-86.
- Bell, Robert R. 1981. *Worlds of Friendship*. Beverly Hills, CA: Sage.
- Bronstein, Phyllis. 1988. "Father-Child Interaction: Implications for Gender-Role Socialization." Pp. 107-24 in *Fatherhood Today: Men's Changing Role in the Family*, edited by Phyllis Bronstein and Carolyn P. Cowan, New York: Wiley.
- Buehler, Cheryl, Christine Anthony, Ambika Krishnakumar, Gaye Stone, Jean Gerard, and Sharon Pemberton, 1997. "Interparental conflict and youth problem behaviors: A meta-analysis," *Journal of Child and Family Studies* 6: 233-47,
- Collins, W, Andrew, 1990. "Parent-child relationships in the transition to adolescence: Continuity and change in interaction, affect, and cognition." In Raymond Montemayor, Gerald R, Adams, and T. P. Gulotta (Eds.), *Advances in adolescent development: From childhood to adolescence: A transitional period?* (pp. 85-106). Newbury Park, CA: Sage.
- Cummings, E. Mark, and Patrick T. Davies. 1994. *Children and Marital Conflict: The Impact of Family Dispute and Resolution*. New York: Guilford.
- Demo, David H., and Alan C. Acock, 1996. "Family structure, family process, and adolescent well-being." *Journal of Research on Adolescence* 6: 457-88.

- Demo, David H., Stephen A. Small, and Ritch C. Savin-Williams. 1987. "Family relations and the self-esteem of adolescents and their parents," *Journal of Marriage and the Family* 49:705-15.
- Dornbusch, Sanford M. 1989. "The sociology of adolescence." *Annual Review of Sociology* 15:233-59.
- Emery, Robert E. 1982. "Interparental Conflict and the Children of Discord and Divorce." *Psychological Bulletin* 92:310-30,
- Emery, Robert E., Frank D. Fincham, and E. Mark Cummings. 1992, "Parenting in Context: Systemic Thinking about Parental Conflict and its Influence on Children," *Journal of Consulting and Clinical Psychology* 60:909-12.
- Farrington, Keith, and Ely Chertok. 1993. "Social Conflict Theories of the Family." Pp. 357-81 in *Sourcebook of Family Theories and Methods: A Contextual Approach*, edited by Pauline G. Boss, William J. Doherty, Ralph LaRossa, Walter R. Schumm, and Suzanne K. Steinmetz. New York: Plenum.
- Fincham, Frank D. 1994. "Understanding the Association between Marital Conflict and Child Adjustment: Overview." *Journal of Family Psychology* 8:123-27.
- Freud, Anna. 1958. "Adolescence." *Psychoanalytic Study of the Child* 13:255-78.
- Gecas, Viktor, and Michael L. Schwalbe. 1986. "Parental Behavior and Adolescent Self-Esteem." *Journal of Marriage and the Family* 48:37-46,
- Gecas, Viktor, and Monica A. Self. 1990. "Families and Adolescents: A Review of the 1980s." *Journal of Marriage and the Family* 52:941-58.
- Grych, John H., and Frank D. Fincham. 1993. "Children's Appraisals of Marital Conflict: Initial Investigations of the Cognitive-Contextual Framework," *Child Development* 64:215-30.
- —. 1990. "Marital Conflict and Children's Adjustment: A Cognitive-Contextual Framework." *Psychological Bulletin* 2:267-90.
- Hall, G, Stanley. 1904. *Adolescence: Its Psychology and Its Relation to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education*. New York: D. Appleton.
- Harold, Gordon T., Frank D. Fincham, Lori N. Osborne, and Rand D. Conger, 1997. "Mom and Dad Are at It Again: Adolescent Perceptions of Marital Conflict and Adolescent Psychological Distress." *Developmental Psychology* 33:333-50.
- Joreskog, Karl, and D. Sorbom, 1993. *LISREL 8: Structural Equation Modeling with the SIMPLEX Command Language*. Lawrence Erlbaum Associates: Hilldale, NJ.
- Kempton, Tracy, Amanda McCombs Thomas, and Rex Forehand. 1989. "Dimensions of Interparental Conflict and Adolescent Functioning." *Journal of Family Violence* 4:297-307.
- Larson, Reed, and Maryse H. Richards. 1994. *Divergent Realities: The Emotional Lives of Mothers, Fathers, and Adolescents*. New York: Basic.
- Montemayor, Raymond. 1986. "Family Variation in Parent-Adolescent Storm and Stress." *Journal of Adolescent Research* 1:15-31.
- —. 1982. "The Relationship between Parent-Adolescent Conflict and the Amount of Time Adolescents Spend Alone and with Parents and Peers," *Child Development* 53:1512-9.
- Montemayor, Raymond, and E. Hanson. 1985. "A Naturalistic View of Conflict between Adolescents and Their Parents and Siblings." *Journal of Early Adolescence* 5:23-30.
- Paikoff, Roberta L., and Jeanne Brooks-Gunn. 1991. "Do Parent-Child Relationships Change during Puberty?" *Psychological Bulletin* 110:47-66.
- Patterson, Gerald R., J. B. Reid, and T. J. Dishion. 1992. *Antisocial Boys*, Eugene, OR: Castalia,
- Schafer, J. L. 1997. *Analysis of Incomplete Multivariate Data*. Chapman and Hall: London.
- Simons, Ronald L., Les B. Whitbeck, Jay Beaman, and Rand D. Conger. 1994. "The Impact of Mothers' Parenting, Involvement by Nonresidential Fathers, and Parental Conflict on the Adjustment of Adolescent Children." *Journal of Marriage and the Family* 56:356-74.
- Smetana, Judith G. 1989. "Adolescents' and Parents' Reasoning about Actual Family Conflict." *Child Development* 60:1052-67.

- Steinberg, Laurence. 1987. "The Impact of Puberty on Family Relations: Effects of Pubertal Status and Pubertal Timing." *Developmental Psychology* 23:451-60.
- —. 1981. "Transformation in Family Relations at Puberty," *Developmental Psychology* 17:833-40.
- Youniss, James, and Jacqueline Smollar. 1985. *Adolescent Relations with Mothers, Fathers, and Friends*. Chicago: University of Chicago Press.