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## Parental Conflict and Marital Disruption: Do Children Benefit When High-Conflict Marriages Are Dissolved?

*A million children experience divorce each year, and some policymakers argue **for** policies that would **make** it more difficult for parents to divorce. However, being exposed to a high degree of marital conflict has been shown to place children at risk for a variety of problems. Using mother-child data from the National Longitudinal Survey of Youth (NLSY) and a prospective design, this research explores two questions: Do the effects of marital disruption on child well-being vary for children whose parents leave high-conflict marriages versus low-conflict marriages? How do children fare when their high-conflict parents remain together? We find that separation and divorce are associated with increases in behavior problems in children, regardless of the level of conflict between parents. However, in marriages that do not break up, high levels of marital conflict are associated with even greater increases in children's behavior problems.*

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High rates of divorce have prompted many observers, largely out of concern for the children involved, to advocate measures to keep marriages together. The accumulated evidence suggests that children, particularly boys, not only have problems in the immediate aftermath of marital disruption, but have difficulties that persist into adulthood as well (e.g., Amato, 1994; Amato & Keith, 1991; Cherlin, Chase-Lansdale, & McRae, 1998). Along with these findings, however, there is evidence that being exposed to a high degree of conflict between married parents also places children at risk for a variety of problems. Consequently, the difficulty for parents, legal professionals, and policymakers weighing what is best for the child lies in determining whether the effects of divorce will be less deleterious than the effects of remaining with two parents in a disharmonious relationship.

Another question is whether the effects of marital disruption on child well-being vary according to the level of marital conflict that children experience before the separation. If the break-up represents an exit from severe marital disharmony, children may make an easier adjustment than if the separation was unexpected. Moreover, children removed from intense parental conflict may fare better than those whose high-conflict parents remain together. In a recent study Amato, Loomis, and Booth (1995) used longitudinal data from a

study of marital instability over **the** life course and documented that the well-being of young adults after a parental divorce was highest among those who experienced high levels of **conflict** before **the** disruption and lowest among those who experienced less conflict before the divorce. Amato and his colleagues argued that when young people are not aware of the level of their parents' unhappiness, divorce is likely to be unanticipated and unwelcomed by the youth.

We attempt to build on the findings of Amato et al. (1995) by examining children who were younger when their parents divorced and whose parents divorced more recently. Children in our sample ranged in age from 4 to 9 years in 1988 (the average **child is 6 years old**) when all of the children were in married, two-parent families. Controlling for children's preexisting levels of behavior problems, we examine their mottler-rated behavior problems scores 6 years later. By then, some of the children's parents had separated or divorced. (The average time since disruption is 3.4 years.) Our analysis addresses two main questions: Do the consequences of marital disruption for children's behavior problems vary, depending on the level of marital conflict that preceded **the** disruption? That is, do children benefit when high-conflict **marriages** are dissolved, but do they show elevated problems when the couple was less conflictual before separation? And how do children fare when their high-conflict parents remain together?

#### BACKGROUND

Accumulated evidence suggests that children who experience divorce and the associated disruptions **in** parent-child relationships, living arrangements, and economic circumstances fare less well than children **in** two-parent families who **do not** divorce (See Amato & Keith, 1991.) Although there is considerable heterogeneity in outcomes, children whose parents separate or divorce are, on average, more likely to exhibit problematic behavior, have poorer mental health and academic performance, and have more social difficulties and lower self-concepts than children whose parents remain married (Amato, 1994). These negative effects have **been** documented in the immediate aftermath of divorce (e.g., Hetherington, Cox, & Cox, 1982) and many years later (e.g., Cherlin et al., 1998; Cherlin, Kiernan, & Chase-Lansdale, 1995; Kiernan, 1992; Zill, Morrison, & Coiro, 1993).

Alternatively, several prospective studies **have** suggested that many of the negative effects attributed to divorce are apparent before the actual **physical** separation (e.g., Baydar, 1988; Block, Block, & Gjerde, 1986; Cherlin et al., 1991; Doherty & Needle, 1991; Morrison & Cherlin, 1995). Prominent among the factors that researchers assume affect children's well-being prior to marital disruption is **interparental** conflict. Parental conflict **is** positively associated with a variety of indicators of children's maladjustment, including conduct disorders, anxiety, and aggression. (See Emery, 1982, 1988; Grych & Fincham, 1990, for reviews.) Exposure to conflict has been shown to influence children directly. Witnessing adult anger is physiologically and affectively stressful for children, and exposure to conflict has been shown to influence children indirectly through its effect on parenting and parents' psychological well-being (e.g., El-Sheikh, Cummings, & Goetsch, 1989; Emery, Fincham, & Cummings, 1992). Some researchers **have** shown that the effects of parental conflict can be more harmful to children than parental absence through death or divorce (Emery, 1982; Jekielek, 1998; Mechanic & Hansell, 1989; Peterson & Zill, 1986). For example, in a longitudinal study of adolescents, Mechanic and Hansell found that those in high-conflict, **married** families had significantly poorer adjustment than those in low-conflict, divorced families. Similarly, Slater and Haber (1984) found that adolescents from high-conflict families reported lower self-esteem and greater anxiety, regardless of whether or not their parents had divorced or remained married.

However, the question of which is more detrimental for children—divorce or exposure to marital conflict—has not been satisfactorily resolved. For example, focusing on **children in married, two-parent** families and examining the consequences of divorces in a subsequent 2-year interval, Morrison and Cherlin (1995) found that **boys** in maritally disrupted families experienced increases **in** behavior problems and decreases in reading achievement. For girls, there were no statistically significant effects of disruption. Because the adverse effects of marital dissolution **held** for boys, even when a predisruption counterpart to the dependent variable was held constant, the results suggested that most of the explanation for the postdisruption difficulties **could be** attributed to the experience of the disruption itself. However, it may be that explicit measures of predisruption marital conflict would have altered the apparent effect of divorce.

An alternative to the hypotheses that either marital disruption or marital conflict is the key explanatory variable is **that** there is an interaction between the two. The interaction hypothesis argues that the effects of divorce vary according to the level of predisruption conflict that the child experienced. Evidence for an interaction between the effects of marital disruption and conflict can be found in the recent work of Amato et al. (1995). They showed that when levels of marital conflict had been high, young adults whose parents had divorced up to 12 years previously actually showed more favorable outcomes than their counterparts with continuously married **parents**, suggesting that the youth were better off when removed from a highly negative situation. However, youth in low-conflict **homes** prior to disruption showed negative responses to divorce, presumably because they were surprised by and less well prepared for their parents' break-up.

Although provocative, Amato et al.'s (1995) work leaves several questions unanswered. First, with its focus on **outcomes** among youth 19 years **old** or older, Amato and his **team** did not address whether the effects of divorce would also vary according to the level of predisruption **conflict** for younger children, a group for whom the **negative** effects of marital disruption appear to be particularly salient (e.g., Block et al., 1986; Morrison & Cherlin, 1995; Zill et al., 1993). Moreover, it may be that children in newly disrupted families **face** challenges (e.g., new living arrangements, changes in neighborhoods or schools, parental quarrels over the division of income and property, and custody battles) that place them at risk for difficulties in adjustment, regardless of how well their parents got along before they separated. Finally, Amato et al. examined four measures of psychological well-being (psychological distress, overall happiness, marital happiness, and social resources) as a function of marital disruption and conflict but did not include youths' problematic behaviors, an outcome that has been consistently and negatively associated with divorce (e.g., Amato & Keith, 1991) and interparental conflict (e.g., Emery, 1982).

Jekielek (1998), in an extension of Amato et al.'s (1995) **study** and of the original analyses on which our article is based (Morrison, Coiro, & Blumenthal, 1994), also examined interactions between marital disruption and marital conflict using data from the NLSY. Jekielek focused on internalized dimensions of children's behavior problems (anxiety and depression-withdrawal), as well as the role

of time since disruption in children's adjustment. She found main effects of disruption and conflict on children's adjustment, as well as interactions indicating that children who remain in high-conflict environments have more internalizing problems than children whose high-conflict parents divorce. However, Jekielek examined a shorter **postdisruption** interval than we do and only a single measure of conflict.

We test two hypotheses related to the associations of marital disruption, predisruption conflict (both frequency and breadth), and children's behavior problems.

Hypothesis 1: When predisruption marital conflict is high, children whose parents divorce will exhibit a decrease in behavior problems, whereas children whose parents have low levels of marital conflict will experience an increase in behavior problems after divorce.

Hypothesis 3: Children whose high-conflict parents remain together will show greater increases in behavior problems than those whose high-conflict parents divorce.

## METHODS

### Data

WC **use** the 1988-1994 waves of the NLSY-Child Supplement, a large longitudinal data set, to explore the relation between predisruption marital conflict and child well-being after marital disruption. The NLSY began as a nationally representative longitudinal survey of American youth who were 14-21 years old in 1979. These youth have been followed annually since 1979. From the 1979 survey to the 1994 survey, excluding individuals who were **explicitly** dropped from the study, the average respondent completed 14.8 out of 16 interviews. In 1986, when the participants were 21-29 years old, the Center for Human Resource Research expanded its **data** collection to include the children of female respondents. Biannually since that date, information has been collected from mothers about their children, and a substantial battery of assessments has been administered directly to the children. Roughly 60% of the women in the NLSY youth cohort had **become** mothers by 1988 (Mott & Quinlan, 1991), the start of the interval examined in the study presented here.

A noteworthy advantage of our study is that the disruptions we examine are contemporary. We have a unique opportunity to examine the consequences for children of divorces that occurred recently—between 1988 and 1994—when rates of divorce in the nation were high.

Despite the advantages of the NLSY child data for a longitudinal analysis of the consequences of marital conflict and divorce, there are also some limitations. First, the children in the NLSY are not fully representative of all children in their age group because the NLSY is a random sample of young women, not of children. The children included in our study represent a cross-section of children born to a sample of women who were between the ages of 21 and 28 years on January 1, 1986. Therefore, the children tend to be born to somewhat younger and disadvantaged mothers (especially the oldest children). The average age at first birth for mothers in our sample is 20.3 years. The national average age was 23.7 years in the late 1980s. The nature of marital conflict and the process and effects of disruption may differ for children born to comparatively older mothers. A second disadvantage of the NLSY is that measures of marital quality and conflict are only available in 1988, 1992, and 1994, precluding analysis of divorces before 1988.

### Participants

Participants in our study are limited to 727 children in undisrupted families with two biological parents in 1988 who had no missing values on the Behavior Problems Index in 1994. We exclude children born out of wedlock, children whose parents died or divorced before 1988, and those whose primary residence was not with their mother. To maximize our sample size, we include siblings in our analysis. Nineteen Percent (135 cases) of the children in our sample have siblings, and we discuss the statistical implications of including them in the analysis section. The average child is 6 years old ( $SD = 1.3$ ), and 50% are male. We limit our analysis to children aged 4-9 years in 1988 for several reasons. First, the assessments available for younger children have less satisfactory psychometric properties. Second, older children in the NLSY-Child Supplement are disproportionately born to teenage mothers. Finally, we are particularly interested in how marital disruption and pre-disruption conflict affects children who are relatively young at the time of the break-up. We control for child's age and mother's age at first birth in all multivariate models.

### Measures

**Behavior problem.** We examine the effects of marital dissolution on the 1994 Behavior Problems Index, which measures mothers' reports of the frequency and types of behavior problems manifested in the last 3 months by their children aged 4 years or older. The Behavior Problems Index contained in data from the NLSY-Child Supplement comprises 32 items developed by Peterson and Zill (Zill, 1990), primarily from Achenbach's (1978) Child Behavior Checklist. The 32 items were selected for inclusion in the NLSY test battery because of their demonstrated ability to distinguish children who were referred for psychological treatment from typical children. The Behavior Problems Index measures both externalizing and internalizing behaviors (for example, "he/she bullies or is cruel or mean to other," and "he/she is stubborn, sullen or irritable"). Zill standardized the index separately for boys and girls using the 1981 National Health Interview Survey-Child Supplement of 15,000 children. These norms then were used by the NLSY staff to convert raw Behavior Problems Index scores to standard scores with a mean of roughly 100 and a standard deviation of about 15. We use these same-sex standard scores in our analyses. Higher scores on the index indicate more behavioral problems.

In order to consider the extent to which separation or divorce changes child well-being, we include a lagged version of our dependent variable, children's behavior problems, drawn from a survey taken when all families were still together. Using pretest and posttest measures in regression analysis to examine change is considered superior to calculating raw gain scores due to better reliability of measures. (See Hummel-Rossi & Weinberg, 1975.) To lessen the chance that it would be confounded with current levels of conflict, we drew the 1986 Behavior Problems Index when possible. For children who were 2 years old in 1986 (too young for the assessment), however, it was necessary to take their 1988 measure.

Means and standard deviations of all variables are included in Table I. Measurement of key independent variables is described below.

**Marital disruption.** Our measure of family disruption is a dummy variable that indicates the experience of either separation (without reunion) or divorce between the 1988 and 1994 interviews. We used detailed marital histories provided by the mothers as part of the NLSY 1979-1994 surveys

TABLE 1. MEANS, PERCENTAGES, AND STANDARD DEVIATIONS FOR INDEPENDENT VARIABLES IN OLS MODELS

Independent Variable	M	S D
<b>Mother and family characteristics</b>		
Mother's age at first birth	20.3	2.7
Mother's AFQT score	39.0	26.3
Years of mother's education in 1994	12.1	2.2
Family income in prior year (1993)	\$36,149	23,700
Number of mother's children in household (1994)	2.8	1.2
Below poverty threshold in prior year (1993)	10%	
Total HOME score prior to disruption	101.8	13.9
<b>Child characteristics</b>		
Male	50%	
Black	10%	
Hispanic	20%	
Birth order	1.7	0.9
Birth weight (ounces)	119.7	19.0
Age in 1988 (months)	72.5	15.8
Behavior Problems Index score before disruption	106.0	14.1
<b>Marital disruption</b>		
Disrupted between 1988 and 1994	19%	
<b>Predisruptioo marital conflict</b>		
High frequency	10%	
High breadth	10%	

Note: Sample is restricted to children aged 4-9 years in 1988 who were living with two married parents with no previous disruptions, who had no missing data on the Behavior Problems Index in 1994, and who usually resided with their mothers;  $n = 727$ .

to determine the timing of marriages, separations, divorces, reunions? and spousal deaths. For children born into married two-parent families that were still together at the 1988 child interview, we constructed a dummy variable to indicate whether a separation or divorce occurred after that date but before the 1994 child interview. Our sample contains 137 children in disrupted families-76 girls and 61 boys.

**Marital conflict.** In the 1988 and 1992 youth interviews, respondents were asked to report the frequency with which they and their spouse argue about each of nine topics: children, money, chores and responsibilities, showing affection, religion, leisure time, drinking, other women, and the respondent's relatives. We used responses to these items to tap two dimensions of interparental conflict, frequency or how often arguments occur and breadth or the range and content of arguments. Evidence indicates that the more frequent the conflict, the more it potentially exposes children to negative parental interactions and the more problematic it is for the child (e.g., Porter & O'Leary, 1980). It is less well known whether children are more severely affected when parental arguments cover a comparatively wide range of topics. To create a measure of frequency, we summed responses, ranging from 3 (*often*) to 0 (*never*), across the nine content areas (observed range: 0-25;  $M = 9.6$ ;  $SD =$

4.2). To create an overall measure of breadth, we recoded each response into yes (1 = often or sometimes) or no (0 = hardly ever or never) and summed the number of content areas that the mother reported arguing about (observed range: 0-9;  $M = 3.2$ ;  $SD = 1.9$ ). Although there is precedence in the literature for using either a continuous measure (e.g., Amato & Booth, 1991; Amato, Loomis, & Booth, 1995; Jekielek, 1998; Kline, Johnston, & Tschann, 1991) or a dichotomous measure (Buchanan, Maccoby, & Dornbusch, 1991; Mechanic & Hansel, 1989; Webster-Stratton, 1989) of marital conflict, we have chosen the latter strategy in order to differentiate clearly between routine and severe levels of conflict. We created dichotomous variables from each of our continuous scales using the 90th percentile as a cut-off.

To determine the timing of the measure of conflict for different subgroups in the sample, we used an approach analogous to Amato et al. (1995). In 1988, all marriages were intact. Among children whose parents subsequently separated or divorced, our marital conflict variables are drawn from the survey most proximate, but prior, to the disruption. For children whose parents remained together, we based our measure of marital conflict on the average across the two time periods (1988 and 1992). Measuring parental conflict in this way, we argue, provides the appropriate measure of the level of conflict from which separation or divorce repre-

sents a potential exit for the child. We test the robustness of our results using alternative strategies for measuring conflict.

*Control variables.* Because divorce does not occur randomly (see White, 1990, for a review) and because many of the characteristics that may predispose families to divorce may also be related to behavior problems in children, we include a variety of measures intended to account for family circumstances before disruption. Our maternal control variables include the mother's years of completed education as of 1988, her age at first birth, her score on the Armed Forces Qualification Test (AFQT) in 1979, and the number of children she had as of 1994. Given the clear inverse relationship between socioeconomic status and divorce (e.g., Martin & Bumpass, 1989), we also control for total family income and poverty status for the year before the timing of our dependent variable (i.e., 1993). We argue that the appropriate counterfactual for assessing whether children who exit high-conflict situations are better off than those who remain in such situations is to examine differences in levels on the Behavior Problems Index, controlling for accompanying deficits in the family's economic circumstances.

Characteristics of the children, themselves, also may have destabilizing effects on marriage (Corman & Kaestner, 1992; Koo, Suchindran, & Griffith, 1984; Morgan, Lye, & Condran, 1988) and are predictive of levels of behavior problems. Hence, we control for the child's sex, birth order, birth weight, race-ethnicity, and age at the 1988 assessment. To account for differences in the quality of the home environment provided to the child in 1988, we include scores on the Home Observation Measurement of the Environment-Short Form. This is a mother-rated and interviewer-rated measure of cognitive and emotional aspects of parenting, as well as aspects of the physical environment (Mott & Quinlan, 1991).

In our multivariate models, we use mean substitution to impute the mean values for 11 cases missing values for child's weight at birth, 141 cases missing values for family income and poverty status in 1993, four cases missing values for mother's education, 34 cases missing AFQT scores, 28 cases missing values for the Home Observation Measure of the Environment-Short Form, and 66 cases missing values for measures of marital conflict. We constructed a dummy variable to identify cases with imputed values and include it in our regression models.

Analysis

We use linear regression models to assess the relationship between parents' marital disruption and marital conflict and children's level of behavior problems in 1994. Because the NLSY child sample contains siblings (and we want to maintain all eligible cases to maximize our sample size), we need to address the potential problem of nonindependence in the random error terms in our models for behavioral problems. Because there may be unobserved family factors that influence the outcomes of children in the family, the error terms for siblings will not be independent, and, consequently, ordinary least squares analysis will underestimate the standard errors for the point estimates of interest. Our solution is to estimate Huber-White standard errors, which correct for the nonindependence of observations across siblings. (See Huber, 1964; White, 1980.)

RESULTS

To set the stage for our analyses of an interaction effect between marital disruption and predisruption conflict, we begin by establishing whether marriages that end in divorce or separation are characterized by higher levels of predisruption conflict than those that remain continuously intact from

TABLE 2. MEANS ON MEASURES OF PREDISRUPTION MARITAL CONFLICT AND MOTHER-RATED BEHAVIOR PROBLEMS, BY MARITAL DISRUPTION STATUS IN 1994

	Parents Separated or Divorced	Parents Remained Married
Predisruption marital conflict		
High frequency of arguments	20%	7%
Large breadth of topics argued about	22%	8%
1994 score on Behavior Problems Index	110.2	106.1

Note: Sample is restricted to children aged 49 years in 1988 who were living with (wo) married parents with no previous disruptions, who had no missing values on the Behavior Problems Index in 1994 or for measures of parental conflict, and who usually resided with their mothers; n = 123 for separated or divorced parents, n = 538 for children whose parents remained married.

1988 to 1994. Table 2 reveals that, compared with children in continuously married families, more than double the percentage of children whose mothers were separated or divorced in 1994 were coded high on each dimension of conflict between their parents. Specifically, 20% of the children who experienced separation or divorce were classified as high on frequency of parental quarrels, compared with 7% of those in the never-disrupted sample ( $p < .001$ ). Twenty-two percent of children in disrupted families were rated high on breadth of parental marital conflict. The comparable figure for children whose parents remained together was 8% ( $p < .001$ ).

Table 2 also allows us to examine whether marital disruption is associated with higher levels of behavior problems. Children whose parents separated or divorced scored, on average, roughly 4 points higher than children whose parents remained together (110 and 106, respectively;  $t = 3.34$ ,  $p < .001$ .) Having established an association between conflict and marital disruption and between marital disruption and subsequent behavior problems in children, we tackled the next question: whether the relationship between marital disruption and child well-being varies according to levels of predisruption conflict.

Table 3 is arranged to allow us to make two comparisons in 1994 scores on the Behavior Problems Index: among children who experienced separation or divorce, those with low versus high-predisruption conflict; and among children in high-conflict families, those whose parents did and did not separate or divorce. A difference in either of these contrasts would suggest an interaction between the effects of predisruption conflict and marital disruption. The scores presented for the four groups of interest are unadjusted for maternal, child, and family control variables. Beginning with the two groups of children who experienced

disruption, we see significantly higher levels of behavior problems among those exiting high-conflict situations ( $t = 1.57$ ,  $p < .10$  for frequency;  $t = 1.78$ ,  $p < .05$  for breadth). For the two groups in high-conflict marriages (frequency as well as breadth), there is no statistical difference in the level of behavior problems observed for children whose parents separated or divorced and for children whose parents remained together.

The results presented thus far have not taken account of behavior problems in children that already may have been apparent before separation took place. Our next step is to examine whether our bivariate evidence of an interaction between the effects of marital disruption and prior conflict holds when we control for children's initial scores on the Behavior Problems Index as well as later family circumstances. Controlling for prior scores allows us to determine whether divorce and high levels of conflict predict increases in children's behavior problems over the 6-year interval. Table 4 presents the coefficients for marital disruption, prior marital conflict, and the interaction of the two effects in models predicting children's behavior problems scores in 1994. Separate models were computed for frequency and breadth of conflict. All of the models control for child's age, sex, birth weight, birth order, predisruption score on the Behavior Problems Index, Black, Hispanic, mother's age at first birth, mother's years of completed education, mother's AFQT-R score, number of mother's children in the household, log of family income in 1993, poverty status in 1993, predisruption quality of the home environment, and a flag for imputed data, although the coefficients for control variables are not reported in Table 4.

In Model 1, where we enter only the main effect of separation or divorce, we find a statistically significant deleterious effect of disruption on children's scores on the Behavior Problems Index.

TABLE 3. MEANS ON MOTHER-RATED BEHAVIOR PROBLEMS SCORES FOR CHILDREN IN 1994, BY PREDISRUPTION MARITAL CONFLICT AND MARITAL DISRUPTION STATUS IN 1994

	High Conflict		Low Conflict	
	Parents Separated or Divorced	Parents Remained Married	Parents Separated or Divorced	Parents Remained Married
Frequency of arguments	113.6	117.2	109.7	105.1
<i>n</i>	25	40	98	498
Breadth of topics argued about	114.1	110.0	109.5	105.5
<i>n</i>	27	41	96	497

Note: Sample is restricted to children aged 4-9 years in 1988 who were living with two married parents with no previous disruptions, who had no missing values on the Behavior Problems Index in 1994 or for measures of parental conflict, and who usually resided with their mothers.

TABLE 4. OLS COEFFICIENTS FOR MARITAL DISRUPTION STATUS, PREDISRUPTION MARITAL CONFLICT, AND INTERACTION IN MODELS PREDICTING CHILDREN'S BEHAVIOR PROBLEMS IN 1994

		Model 1	Model 2	Model 3
High frequency of arguments	Separated or divorced	3.22**	2.91**	3.84***
	High frequency of conflict		4.70***	7.02***
	(Separated or divorced) x (high conflict)			-6.75'
R <sup>2</sup>	.27			
Large breadth of topics argued about	Separated or divorced	3.22**	2.98**	2.98**
	Large breadth of conflict		2.69*	2.70
	(Separated or divorced) x (high conflict)			-0.0'
R <sup>2</sup>	.28			

Note: Sample is restricted to children aged 4-9 years in 1988 who were living with two married parents with no previous disruptions, who had no missing values on the Behavior Problems Index in 1994 ( $M = 106.9$ ,  $SD = 14.3$ ), and who usually resided with their mothers;  $n = 727$ . Tables of coefficients for all variables are available from authors.

\* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

The experience of marital disruption significantly raises children's scores over predisruption levels by roughly one fifth of a standard deviation (3.2 points). By adding a main effect for each high-conflict variable in Model 2, we explore whether predisruption marital conflict affects child well-being over and **above the** effect of divorce or whether the apparent effect of marital disruption is attributable to the disharmony that existed before the break-up. As shown in the second column of Table 4, both of our measures of prior marital conflict have a statistically significant main effect—adding 3–5 points to the Behavior Problems Index, controlling for other child and family factors. Note that the coefficient for high frequency of conflict exceeds the effect of divorce, **but the effect** of high breadth of conflict is fairly comparable with the effect of marital disruption. It is noteworthy that the magnitude of the disruption coefficient is barely reduced and remains statistically significant when we add measures of conflict. In other words, children who experience their parents' separation or divorce show a notable increase in behavior problems scores, and this increase is not attributable to the effects of predisruption conflict. Furthermore, because we are controlling for current income and poverty status, this effect is arguably net of the effects of **the** downward economic mobility that often accompanies divorce.

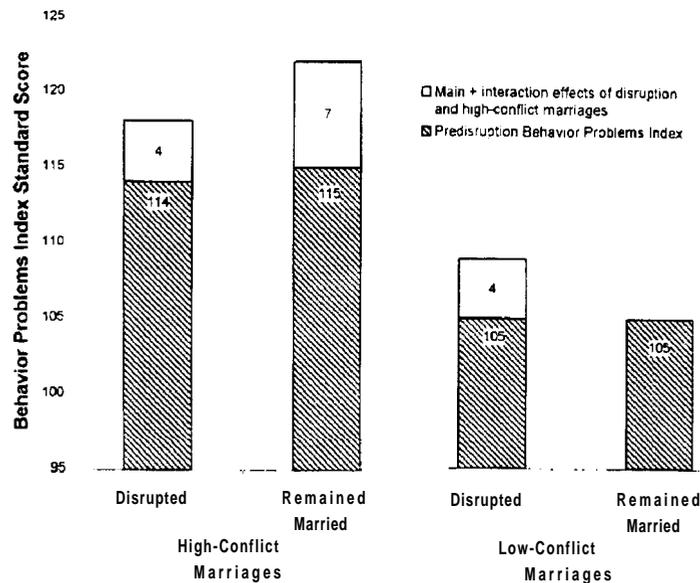
Our final question in this multivariate context is whether the effect of marital dissolution differs according to the level of conflict that preceded the disruption. As shown in Model 3, we observe a statistically significant interaction between the effects of divorce and conflict but only for conflict that is frequent. Fully understanding this statistically significant interaction requires that we make two separate comparisons of outcomes: across the two disrupted groups and across the two high-

conflict groups. **Moreover**, we need to take account of children's predisruption scores on the Behavior Problems Index to appreciate the association between disruption and children's behavior problems at the end of the period.

Figure I illustrates both average predisruption scores on the Behavior Problems Index and increases in scores on the Behavior Problems Index that are predicted by the interaction model from Table 4 for children in the four disruption-conflict categories. Among children whose parents separated or divorced (first **and** third bars), there was an equivalent increase in behavior problems over prior levels (4 points), regardless of whether the child exited a high-conflict or low-conflict situation. To test this, we entered dummy variables representing the different combinations of marital status and conflict in a model (not shown) and found that the coefficient for low-conflict divorce was not statistically different from the effect of being in the high-conflict divorce group. Thus, contrary to our expectations, exiting high-conflict **marriages** did not attenuate behavior problems in children. That is, net of prior levels of behavior problems, disruption was no less deleterious for children leaving high-conflict situations than it was for children whose parents had had relatively harmonious marriages. The bivariate results presented in Table 3 and these multivariate results attest to the importance of accounting for children's prior levels of behavior problems. Specifically, children from high-conflict marriages already showed elevated behavior problems scores before their parents' separations.

To answer more completely the question of whether children **benefit when** high-conflict marriages dissolve, we need to know how these children might have fared if their parents had stayed together. A comparison across the two high-conflict

FIGURE 1. CHILDREN'S 1994 BEHAVIOR PROBLEM INDEX SCORES AS FUNCTION OF INTERACTION BETWEEN MARITAL CONFLICT AND MARITAL DISRUPTION, ADJUSTED FOR PRIOR BEHAVIOR PROBLEM LEVELS AND FAMILY BACKGROUND



categories (first and second bars of Figure 1) gives some insight into this. Here we see that children whose high-conflict parents remained together had a larger increase in behavior problems than their counterparts whose parents broke up (7 points vs. 4 points, respectively,  $p < .05$ ).

To test the robustness of our results to the way we measured parental conflict and marital disruption, we examined several alternatives. We were concerned with three issues related to the interaction that we observed between marital disruption and conflict: (a) We may have confounded conflict and parental divorce by using a conflict measure that was proximate to the separation; (b) we may have missed information by using a dichotomous measure of high conflict; (c) we may have underestimated the effect of marital disruption by controlling for current economic circumstances. To address the first concern, we estimated the same models shown in Table 4 but substituted 1988 predisruption measures of marital conflict for all respondents, rather than the most proximate measure of average of 1988 and 1992. With this strategy we observe roughly equivalent, statistically significant main effects of disruption ( $\beta = 3.7, p < .05$ ) and frequency of parental conflict ( $\beta = 3.2, p < .10$ ) but not a statistically significant interaction between the two. Thus, if we control for parental conflict at the beginning of the period (when quarrels may not yet have reached severe levels), disruption does not provide the same level of re-

lief to the high-conflict and disrupted group as it does when we account for the level of arguing that occurs more immediately before the separation or divorce. Our second step was to explore alternatives to our dichotomous measure of severe conflict. We created a trichotomous measure of conflict, with the middle group comprising children with values on parental conflict ranging from the mean plus or minus one half a standard deviation. We found, as we did above, that the effect of divorce is no better or worse, depending on predisruption levels. But unlike our results using dichotomous measures, we also found no statistical difference in the change in scores on the Behavior Problems Index for children in the disrupted group versus the intact high-conflict group. Instead, the significant interaction effect was driven by the fact that children in low-conflict and medium-conflict families who remained together had fewer behavior problems than those in the high-conflict, disrupted families. Finally, we removed contemporaneous measures of family income and poverty and obtained results that were virtually identical to the results reported above.

In sum, the results reported in Table 4 suggest that the experience of parental separation and divorce is uniformly harmful to children (at least in the first years after disruption), regardless of how often their parents quarreled beforehand. However, parents remaining married is not a better alternative for children when conflict between the parents is

high. Indeed, the largest increases in scores on the Behavior Problems Index were observed for the children whose parents remained in such marriages.

#### DISCUSSION

We sought to examine whether the effect of parents' separation and divorce on children's behavior problems varies according to the level of conflict between parents before the disruption. We used the NLSY mother-child data to examine this issue in a sample of 4- to 9-year-olds in 1988 who began the study in two-parent, married families. An average of 3 years later, 19% of the children experienced the break-up of their parents' marriage. We were able to compare the 1994 levels of behavior problems of children whose parents separated or divorced with the levels of children whose parents remained married, net of their levels of behavior problems at the outset. This prospective strategy allowed us to examine changes in behavior problems scores after marital dissolution and enabled us to make inferences, although not firm conclusions, about causality.

We observed a sizable negative effect of marital disruption on children's behavior problems, controlling for predisruption scores on the Behavior Problems Index and other child and family characteristics. We explored the main effect of both frequency and breadth of marital conflict on child well-being and also observed the extent to which these predisruption measures accounted for the apparent effects of divorce. We found that the negative effect of divorce remained relatively large and statistically significant when conflict was added to our models. This suggests that factors associated with divorce, itself, such as parental absence, changes in custody and relationships, and declines in parents' psychological well-being, explain increases in children's behavior problems over and above the effect of predisruption parental quarrels. Nonetheless, we found that prior reports of high levels of marital conflict have a large and statistically significant adverse effect on children's behavior problems. This is particularly true for our measure of the frequency of parental conflict. Indeed, the adverse effect of frequent marital quarrels is larger than the deleterious effect of separation and divorce. Finally, consistent with Amato and colleagues' (1995) study, we found a large, statistically significant interaction between the effects of frequent marital conflict and disruption. Unlike our predecessors, however, our multivariate results did not indicate a benefit for chil-

dren exiting high-conflict marriages. Children experienced a 4-point average increase in behavior problems after parental separation and divorce, regardless of the level of conflict that predated the disruption. Furthermore, in our sample, the greatest increase in behavior problems was observed among children whose parents remained married, despite very frequent quarrels.

Our failure to uncover the expected differentials in the effect of divorce may be due to the younger ages of the children in our sample at the time of disruption or may be due to the comparatively shorter duration since disruption in our analysis, compared with the study by Amato et al. (1995). Any relief or benefit gained by being removed from a high-conflict situation may not be apparent for several more years or until adulthood. It is possible that if we were to follow these children, we would find a pattern similar to the Amato team's findings. In her examination of the relative importance of parental conflict and marital disruption on children's internalizing behavioral problems, Jekielek (1998) reports that the stress-relieving effects of leaving a high-conflict marriage become more apparent over time. However, she only observed children up to 4 years after disruption.

In addition, the set of conflict measures available in the NLSY is limited in scope, compared with the types of information often explored in analyses of parental conflict and children. For example, although presumably there is variation in the extent to which children are exposed to or shielded from parental conflict, we are not able to account for these differences. Nor does our measure provide an indication of the process by which disagreements in each area are resolved. For example, arguments may be calm and amicably resolved, or they may be heated or openly hostile. Moreover, our predisruption measure of conflict is a snapshot measure. It would be preferable to measure whether the child has had relatively long-term or short-term exposure to intensive parental quarrels. Furthermore, these measures of conflict are from a single rater, the mother. Ideally, one would also have reports about parental conflict from her spouse or the children. Moreover, the Behavior Problems Index score, our dependent variable, is also mother rated. In sum, respondents who rate relatively low on the measures used here may be quite a heterogeneous group.

The fact that the association between marital dissolution and the Behavior Problems Index does not differ according to prior levels of conflict in the expected way also may relate to the dimen-

sions of conflict that we were able to measure. The conflict measures employed in the study by Amato et al. (1995) reflect not only the frequency of arguments, but also their severity—specifically whether marital disputes ever involved physical aggression. Research on the effects of witnessing and experiencing physical violence (Sternberg et al., 1993) points to the serious and long-lasting consequences of such exposure for children. It seems likely that the beneficial effects of removal from a violent household through divorce could outweigh the costs of marital disruption for the child. Because the NLSY does not include a measure of physical marital aggression, our analysis could not detect such a pattern. Moreover, it is perhaps not surprising that our measure of the breadth of marital conflict showed fewer and weaker associations with children's behavior problems than did our measure of frequency of conflict. Our results suggest that children are sensitive to the amount of arguing, rather than the range of topics about which parents argue.

Finally, after divorce, parental conflict may diminish when former spouses establish a more functional family life, or conflict may intensify when couples work through custody arrangements (Emery & Coiro, 1997). Levels of postdivorce conflict have been shown to predict child and adolescent adjustment (Buchanan et al., 1991; Forehand, Thomas, Wierson, Brody, & Fauber, 1990; Luepnitz, 1982). Because the NLSY does not include a measure of postdivorce conflict, we were unable to examine whether the behavior problems of children in disrupted families reflect exposure to on-going conflict, rather than prior conflict.

Despite these limitations, our results are sobering. Regardless of the level of conflict reported before the disruption, separation and divorce are associated with notable increases in young children's behavior problems, namely a rise of nearly one third of a standard deviation. This is in keeping with the magnitude of the effect sizes (one fifth to one fourth of a standard deviation) that Amato and Keith (1991) report in their meta-analysis of studies of the long-term consequences of parental divorce for adult well-being. Moreover, our study reinforces evidence from Amato's team (1995) and numerous other researchers that frequent marital conflict has a deleterious effect on children, possibly even exceeding the adverse effect of physical separation or divorce. We began with the question: "Do children benefit when high-conflict marriages are dissolved?" The answer is a qualified "yes." We found that children whose

high-conflict parents remained together throughout our study demonstrated the largest increase in behavior problems. However, children whose high-conflict parents subsequently separated or divorced had the highest scores on the Behavior Problems Index at the outset. In simple terms, this means that if we took a snapshot view of all the children in 1994, we would not be able to distinguish children whose high-conflict parents separated from those whose high-conflict parents stayed together.

Findings such as these do not provide clear answers for parents, legal professionals, and policy analysts trying to put the best interests of children above other concerns when divorce is contemplated because they underscore that neither alternative is without cost to children. In the absence of information about how the children in our sample will fare over the long term, perhaps the clearest signal comes from the children in two-parent families with low levels of parental conflict—clearly the group who is faring best in this study.

#### NOTE

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