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Marital Conflict, Parent-Child Relations, and Youth Maladjustment

A Longitudinal Investigation of Spillover Effects

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Contemporaneous and longitudinal associations among marital conflict, parent-child relationship quality, and youth maladjustment were examined using data from the National Survey of Families and Households. Analyses were based on 551 married families with a child age 5 to 11 years at Wave 1. The concurrent association between marital conflict and youth externalizing problems at both waves was mediated completely at Wave 1 and partially at Wave 2 by harsh discipline and parent-youth conflict. The concurrent association between marital conflict and internalizing problems at both waves was mediated partially through parent-youth conflict. Longitudinal mediating effects were detected through stable marital conflict over 5 years and through its connection with parent-youth conflict. Findings delineate areas of specificity and stability in marital conflict processes as children transition from middle childhood through adolescence.

**Keywords:** marital conflict; externalizing problems; internalizing problems; parent-child relationship; spillover

Numerous studies indicate that frequent exposure to marital hostility is associated with behavioral and emotional problems in children (e.g., Buehler et al., 1997; Davies, Harold, Goeke-Morey, & Cummings, 2002; Harold, Fincham, Osborne, & Conger, 1997). Mechanisms that account for
In the current study, we tested the hypothesis that marital conflict influences children’s adjustment, in part, through its link to parent-child relationship quality. Although this perspective has received a fair amount of support, research is limited in three ways. First, much of what is known about the relationships among marital conflict, parent-child relations, and children’s adjustment is based on cross-sectional studies (e.g., Crockenberg & Langrock, 2001; Gonzales, Pitts, Hill, & Roosa, 2000) and a few short-term longitudinal investigations (e.g., Harold & Conger, 1997; Harold et al., 1997). We build on these studies by examining the mediational role of parent-child relationship quality using two waves of data from a representative sample of U.S. families, which permits broader generalizations of findings and an assessment of family processes during a 5-year period as children pass from middle childhood to adolescence. The focus on the transition to adolescence addresses a gap in the literature by lending insight into sources of continuity and discontinuity in the link between marital conflict and parent-child difficulties as families undergo relational transformations (Cox, Paley, & Harter, 2001).

Second, most studies have focused on a single dimension of parenting or on global qualities of the parent-child relationship. Represented less well in the literature are studies that examine multiple qualities of the parent-child relationship simultaneously so that mediational processes associated with specific parenting dimensions can be detected (e.g., Buehler & Gerard, 2002; Fauber, Forehand, Thomas, & Wierson, 1990; Gonzales et al., 2000). Thus, we conceptualized parent-child relationship quality as a multidimensional construct to assess the unique and relative influence of three parenting dimensions as potential causal pathways between marital conflict and children’s maladjustment. We extend the literature by examining these associations contemporaneously and longitudinally to assess their stability over time.
Third, literature is equivocal with respect to whether marital conflict affects children directly after taking into account the influence of parenting behaviors. This is because of a tendency by researchers to study either direct effects or indirect effects without examining the competing model and to conflicting findings among studies that have tested both effects. Theoretically, as literature advances to more complex models that detail multiple pathways of influence between marital conflict and children’s maladjustment, documentation of the unique and shared influence of marital conflict and parent-child relations is increasingly important to inform this progressive line of scholarship (Harold et al., 1997). From a practical standpoint, it is useful to know whether intervention should be geared toward problems in the marital subsystem or tailored more specifically to aspects of the parent-child relationship that are vulnerable to ongoing marital hostility. Thus, our model includes a direct pathway from marital conflict to children’s maladjustment and indirect pathways through each parenting dimension.

**Theoretical Framework and Literature Review**

Our focus on parent-child relations as a key linking mechanism in the association between marital conflict and children’s maladjustment rests on the theoretical notion of “spillover,” or the idea that affect and behavior generated in one relational setting transfer to other relationships (Engfer, 1988). Conceptualizations of spillover processes originate from a variety of theoretical orientations such as stress (Conger et al., 1992, 1993), social learning (Patterson, 1982), and systems theories including the ecological perspective (Almeida, Wethington, & Chandler, 1999) and family systems framework (Anderson, Lindner, & Bennion, 1992). Although spillover processes are depicted from slightly different angles, these perspectives share the assumption that marital hostility primes subsequent parent-child interaction through the transfer of anger and tension to the parent-child dyad. Given the salience of the parent-child bond in children’s socialization (Peterson & Hann, 1999), scholars believe that children’s psychosocial development can be compromised when marital conflict leads to punitive discipline, disengagement by parents, and negative interaction between parents and children. Thus, we focus on harsh discipline, parental involvement, and parent-child conflict as possible spillover mechanisms. Our conception of spillover processes adheres most closely to a systems perspective by considering the dynamic nature of families as they move through time and by highlighting areas of mutual influence between parents and children.
Harsh Discipline

Harsh discipline has received considerable attention as a potential spillover mechanism. Hostility and frustration engendered by marital conflict can result in parents’ reliance on power-assertive techniques to manage children’s behavior, which are linked consistently to externalizing and internalizing problems in children (Barnes & Farrell, 1992; Dodge, Pettit, & Bates, 1994; Kandel, 1990). Findings from several different sources support this contention. For instance, in a meta-analytic review of 138 effect sizes from 39 studies that examined the link between marital conflict and parenting behaviors, Krishnakumar and Buehler (2000) determined that the average weighted effect size was \( r = .30 \). Effect sizes based on the association between marital conflict and harsh discipline were stronger than those based on the association between marital conflict and lax control and general parenting quality.

More direct support for the spillover hypothesis is evident in studies that document an increase in parental hostility following an incident of marital hostility. Using observational data and daily emotion checklists, Almeida et al. (1999) reported that the likelihood of a tense parent-child interaction involving a difficult discipline encounter on a given day was 41% higher for mothers and 60% higher for fathers when marital tension occurred the previous day. This finding corroborates experimental work by Jouriles and Farris (1992), who found that fathers involved in a conflictual marital interaction delivered more threatening commands to their sons compared to fathers who were involved in a nonconflictual interaction with their spouse. Other experimental studies, however, have not been successful in establishing that marital conflict increases harsh discipline practices (Kitzmann, 2000; Mahoney, Boggio, & Jouriles, 1996).

Finally, several studies based on formal tests of mediation or indirect effects have documented that harsh discipline partially accounts for the relation between marital conflict and children’s maladjustment (Buehler & Gerard, 2002; Crockenberg & Langrock, 2001; Harold & Conger, 1997; Harold et al., 1997). However, two studies refute this by finding nonsignificant mediating effects (Frosch & Mangelsdorf, 2001; Gonzales et al., 2000). Sample differences could account for this discrepancy. The former study was based on preschool children. Although spillover from marital conflict to hostile parenting was detected, a direct effect between hostile parenting and children’s adjustment was not evident. The latter study was based primarily on Mexican American youth in their middle childhood years, and the researchers acknowledged that harsh discipline might serve a more positive function for minority youth in high-risk environments. The study by Harold and Con-
ger (1997) constitutes the most rigorous analysis to date through its assessment of marital conflict, parent hostility, and children’s maladjustment in a time-lagged fashion with 1-year intervals separating predictor variables. As a whole, however, literature is limited by samples with restricted generalizability and data that preclude a test of whether spillover in the form of harsh discipline is stable from middle childhood to adolescence.

Parental Involvement

Conceptualized along the dimension of support, parental involvement is defined as the degree to which parents spend time with their children engaged in meaningful social and relational activity. Conceived in this manner, involvement can be viewed as a behavioral property of the parent-child relationship that reflects parental investment in the child, regular expression of interest by the parent toward the child, and an indication of cohesion in the parent-child subsystem. Parents who are uninvolved in their children’s lives might convey a message of disinterest. Children could respond to parental indifference with emotional distress or defiance to elicit parental attentiveness (Ge, Best, Conger, & Simons, 1996).

Frequent marital conflict generally is viewed by scholars as a source of ongoing tension that can preoccupy parents and deplete their emotional resources, possibly leading to disengagement from their children. Despite this recognition, there are few direct tests of the proposition that marital conflict affects children’s maladjustment through decreases in parental involvement and attentiveness. Most studies have focused on affective properties of the parent-child relationship indicative of emotional closeness in the parent-child relationship (e.g., parental warmth, rejection). However, parental involvement is important to consider as a distinct concept for two reasons. First, some degree of shared activity is necessary for relationships to flourish; thus, parental involvement is a cornerstone to connective bonds between parents and children.

Second, given fundamental changes in the nature of parent-child relations as children make the passage from middle childhood to adolescence, it is important to determine whether spillover from marital conflict in the form of reduced parental involvement varies as a function of children’s developmental stage. Some reduction of parental activity is normative during adolescence when peer relationships become a priority in children’s lives (Brown, 1990); thus, low parental involvement arising from marital conflict could be more harmful to younger children. Yet parental involvement might be equally or more important during adolescence. Marked detachment from parents during adolescence is neither typical nor desirable, as it might result
in youths’ isolation or dislocation from the family at a time when they are vulnerable to outside social influences (Steinberg, 1990). Limited evidence to date supports the first argument. Using cross-sectional data from the National Survey of Families and Households (NSFH; Sweet & Bumpass, 1996; Sweet, Bumpass, & Call, 1988), Buehler and Gerard (2002) found that parental involvement mediated the association between marital conflict and children’s global maladjustment for preschool and middle school children, but not for adolescents. Using a sample of 5- to 11-year-old children from the same database, we extended the current study by examining the longitudinal associations among marital conflict, parental involvement, and youth maladjustment. Based on the aforementioned study, we anticipated stronger linkages among these variables for children who are in their middle childhood years.

**Parent-Child Conflict**

Normative transformations to family relations occur as children make the transition to adolescence. One manifestation of this change is a potential increase in conflict between parents and children. Conflict is inevitable in all social relationships, and parent-child discord can serve positive functions despite its temporary disruption to family life, such as fostering children’s independence (Steinberg, 1990). And contrary to early prevailing views that depict adolescence as a period characterized by tumult, stress, and social unrest, large-scale investigations suggest that although conflict occurs fairly regularly in families with adolescent children, most parents and their adolescents do not experience a high amount of conflict nor do they disagree, as a general tendency, about substantive issues (Barber, 1994).

However, parent-child conflict could be problematic for adolescent development if it affords little opportunity for positive interaction or if it occurs against the backdrop of broader family problems (Steinberg, 1990). Research supports this contention. Using cross-sectional data from the NSFH, Buehler and Gerard (2002) found that frequent parent-child conflict partially mediated the association between marital conflict and children’s global adjustment in a sample of families with children aged 12 to 18 years. Acoc and Demo (1999) also drew from NSFH data to examine the concurrent and longitudinal associations among marital conflict, parent-youth conflict, and children’s maladjustment. The researchers found that early marital conflict influenced later adolescent maladjustment (assessed 5 years later) indirectly through its longitudinal association with parent-adolescent conflict. Early marital conflict also was associated with concurrent maladjustment problems in children, which was related directly to subsequent parent-adolescent
conflict. Thus, this study demonstrated not only that parent-child conflict plays a critical role in children’s development, particularly during adolescence, but also that children’s behavior might serve an important function in maintaining negative family processes that promote poor developmental outcomes over time. In light of this finding and consistent with a systems perspective, our model includes a path from early child maladjustment to later parent-child conflict. We extended Acock and Demo’s work by examining parent-child conflict in conjunction with harsh discipline and parental involvement.

As a further effort to add precision to the literature, we tested our conceptual model across sons and daughters and across same-gender and cross-gender parent-child dyads. There is some evidence that the quality of parent-child interactions in families who are maritally distressed differs for sons and daughters (see Cox et al., 2001, for review on the role of gender in marital conflict processes). For instance, some research suggests that boys are less likely to be shielded from marital conflict (Cummings & Davies, 1994) and are more likely to be scapegoated for marital difficulties (Jouriles & Norwood, 1995). There also is some indication that marital conflict negatively affects opposite-gender parent-child relationships to a greater degree than same-gender parent-child relationships. This pattern could result from the tendency by children in families who are maritally distressed to side with the same-sex parent (Cummings & O’Reilly, 1997), a dynamic that is potentially destructive to the bond between children and their opposite-sex parent. However, research is inconclusive in this regard, and further research is necessary to determine whether spillover processes involve gender-differentiated dynamics.

**Conceptual Model**

Our conceptual model is presented in Figure 1. All constructs are measured at both waves so that the degree of stability for each construct can be determined and so that cross-lagged effects can be tested. We anticipated that marital conflict, parenting behaviors, and youth maladjustment are fairly stable across time. We also expect that marital conflict is associated with youths’ concurrent maladjustment at both waves in part through its association with harsh discipline, parental involvement, and parent-child conflict. Based on findings by Acock and Demo (1999) and Harold and Conger (1997), we expected that early marital conflict is associated indirectly with later adolescent maladjustment through its direct associations with concurrent child maladjustment, later marital conflict, and later parent-adolescent conflict. In the absence of studies documenting enduring effects of marital
Disagreement → Overt Conflict → Marital Conflict → Harsh Discipline → Parental Involvement → Parent-Youth Conflict → Harsh Discipline → Parental Involvement → Parent-Youth Conflict → Child Maladjustment → Adolescent Maladjustment → Wave 1 → Wave 2

Figure 1
Proposed Process Relations Among Marital Conflict, Parent-Child Relations, and Youth Maladjustment
conflict on harsh discipline and parental involvement, we do not specify pathways from early marital conflict to these parenting dimensions assessed at Wave 2. Instead, we take a more conservative approach by suggesting that stability of marital conflict over time is the primary mechanism for sustaining these ineffective parenting behaviors as children transition from middle childhood to adolescence.

The conceptual model also reflects the direct effect of marital conflict at both waves. Using a cross-section of families from the NSFH database, Buehler and Gerard (2002) found that marital conflict had a direct effect on 5- to 11-year-old children’s maladjustment in addition to indirect effects through harsh discipline and parental involvement. The direct path was not significant for children between the ages of 12 and 18 years, a reflection perhaps of the overriding influence of parent-adolescent conflict. Thus, it might be the case that different processes operate for children in middle childhood than for those in adolescence. However, this question is tested better with longitudinal data. Given our focus on overt, marital hostility and evidence from analogue studies documenting increases in child distress after exposure to intense, outwardly expressed adult conflict (Cummings & Davies, 1994), it is reasonable to expect a residual direct effect of marital conflict after considering the influence of parent-child relationship quality. This might particularly characterize children moving into adolescence because the quality of adult, intimate relationships becomes increasingly salient to youth.

**Method**

**Data**

This study is based on parent interview data from Wave 1 (W1) and Wave 2 (W2) of the NSFH. The NSFH is a representative sample of U.S. households with an adult age 19 years and older. Several demographic groups were oversampled including minorities, cohabiting couples, recently married couples, single-parent families, and stepfamilies. The first wave of data is based on 13,008 interviews collected between 1987 and 1988; the second wave of data is based on 10,005 interviews collected between 1992 and 1994. Only those parents who participated at both waves of data collection were included in this investigation. The subsample was restricted further by including only those parents who were in their first marriage, continuously married at both waves, and who had a focal child between age 5 and 11 years at W1 (267 sons and 284 daughters). The 551 respondents included 267 fathers and 284 mothers.
Measures

Marital conflict. Two manifest indicators of marital conflict were assessed: marital disagreement and overt conflict. Frequency of marital disagreement at W1 and W2 was measured using six items that assess the extent to which the couple disagreed about household tasks, money, time spent together, sex, in-laws, and children (NSFH labels: W1—e706a, e706b, e706c, e706d, e706f, e706g; W2—mt613a, mt613b, mt613c, mt613d, mt613e, mt613f). The response format ranged from 1 (never) to 6 (almost every day). Interitem consistency of the W1 and W2 scales was .80 and .79, respectively. Overt conflict was measured at W1 and W2 with three items that assessed how often the couple discussed disagreements calmly (reverse scored), argued heatedly or shouted at each other, and hit or threw things at each other (NSFH labels: W1—e707b, e707c, and e707d; W2—mt614b, mt614c, mt614d). The response format was 1 (never) to 5 (always). Cronbach’s alpha was .54 for W1 and .49 for W2.

Parent-child relationship. Three manifest indicators of parent-child relations were assessed at both waves: harsh discipline, parental involvement, and parent-child conflict. At W1, harsh discipline was assessed through two items. Items assessed how often the parent yelled at the focal child and spanked or slapped the child (NSFH labels: E1003e, E1003c). The response format included 1 (never) to 4 (very often). At W2, harsh discipline was assessed through three items. Items included how often the parent yelled at the focal child for bad behaviors, spanked or hit the child, and yelled or shouted at the child (NSFH labels: ml20, ml22, ml32). The response format was 1 (never) to 5 (always). Interitem consistency of the scale was at .65. Other researchers have used these same items to assess parenting processes, producing evidence of construct validity (Amato & Fowler, 2002; Buehler & Gerard, 2002).

Parental involvement at both waves was assessed with four items that measured the degree to which parents spend time each week with their child in various activities. Parents indicated how often they and their child engaged in activities away from home, worked at home on projects or played together, had private talks, and did homework together (NSFH labels: W1—e1002a, e1002b, e1002c, e1002d; W2: mt908a, mt908b, mt908c, mt908d). Response format was 1 (never) to 6 (almost every day). Reliability at W1 was .69 and .75 at W2.

Parent-youth conflict at W1 was assessed through two items. Parents indicated how often in the past 12 months they had argued or had difficulty dealing with the focal child and how often generally they argued or had difficulty
dealing with the focal child (NSFH labels: m285, m287). The response format was 1 (never) to 6 (almost every day). At W2, parent-adolescent conflict was assessed through six items. Parents indicated how often they had conflicts with their adolescent child in the areas of dress, friends, helping around the house, school, family members, and money (NSFH labels: ml77, ml79, ml80, ml81, ml82, and ml83). The response format was 1 (never) to 6 (almost every day). Interitem consistency was .66.

Youth externalizing and internalizing problems. Youth externalizing and internalizing problem behaviors at W1 were assessed through two items each. Parents indicated the degree to which their child bullies or is mean to others and loses his or her temper easily (NSFH labels for W1 externalizing problems—m305d, m305g) and the degree to which the child was unhappy, sad, or depressed and fearful or anxious (NSFH labels for W2 internalizing—m305b, m305f). In W2, externalizing problems were assessed through 10 items (NSFH labels: mt701a, mt701d, mt701f, mt701i, mt701j, mt701k, mt702c, mt702d, mt702g, mt702h), and internalizing problems were assessed through six items (NSFH labels: mt701b, mt701c, mt701e, mt701n, mt702e, mt702f). These items were abstracted from the Child Behavior Checklist (Achenbach, 1991). Response format at both waves was 1 (often true) to 3 (not true). Scores were recoded so that higher values reflected poor adjustment. Cronbach’s alpha for externalizing problems at W2 was .84 and for internalizing problems at W2 was .75.

Analytic Procedures

All scales were created in SPSS (SPSS, Inc., 2001). The amount of missing data generally constituted about 5% of cases across variables of interest. Exceptions included items assessing harsh discipline at W2, which were missing approximately 20% of values. To assess bias that might result from missing data, we compared respondents with and without missing data on several demographic factors (i.e., respondent’s age, education level, family income, child age). Few differences between the two groups were detected, and these were limited to parents’ education level. Respondents with missing data on marital disagreement, parental harsh discipline, and parental involvement were less educated than were respondents who reported on these variables. Missing data were imputed at the item level using the expectation maximization method in SPSS (EM). EM is a full information method of imputation that uses an iterative procedure to fit the best values. It is preferable to many procedures for handling missing data such as mean substitution or the deletion of cases with missing values because it produces less
biased estimates (Acock, 1997). However, imputing values using EM might result in an underestimation of standard errors when analyzing data using structural equation modeling (SEM; www.smallwaters.com/amos/faq/faqmissdat.html#t1q1). We used this method of handling missing data rather than a maximum likelihood technique (i.e., full information maximum likelihood [FIML]) so that fit indices could be estimated. The potential limitations imposed by this choice are considered when interpreting the findings, particularly those for harsh discipline because more data were imputed.

The spillover model was tested using SEM (AMOS 5; Arbuckle, 2003). Separate models were conducted for externalizing and internalizing problems. As a first step, we tested a basic model on the total sample that included a direct path between marital conflict and youth maladjustment at both waves and the stability paths for marital conflict and youth maladjustment across waves of data (see bolded lines in Figure 1). This allowed us to establish the direct association between marital conflict and youth maladjustment, controlling for stability in parents’ marriage and children’s behavior over time.

Second, mediating effects of parenting behaviors as specified in Figure 1 were examined for the total sample. Fixed parameters, such as the correlations between error terms, were estimated only if it made sense conceptually and the model fit improved substantially. Model fit was ascertained using various statistical indices including chi-square statistic, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA; Byrne, 2001). A nonsignificant chi-square value indicates good fit of the model to the data. However, given the sensitivity of the chi-square statistic to sample size, additional fit indices that are less dependent on sample size also were used to evaluate model fit. Values of .90 or greater on GFI, AGFI, and CFI indicate good fit of the model to the data (Schumaker & Lomax, 1996). An RMSEA value lower than .05 indicates good fit, and values up to .08 are considered reasonable fit (Browne & Cudeck, 1993). Nested models were compared using the chi-square difference test (Bentler, 1990).

Next, the Sobel (1982) test was used to determine whether the indirect effect of an independent variable on the dependent variable via the mediator was significantly different from zero. It involves calculation of the t ratio from the betas and standard errors of the link between the independent variable and mediating variable and between the mediating variable and the dependent variable. Calculation of the t ratio is done using the following formula:

\[
t\text{ratio} = \frac{bc}{\sqrt{c^2s_b^2 + b^2s_c^2 + S_bS_c}}
\]
where $b = \text{estimate of the path between the independent and mediating variable}$, $c = \text{estimate of the path between the mediating variable and dependent variable}$, $S_b = \text{standard error of } b$, and $S_c = \text{standard error of } c$.

After establishing model fit for the total sample, we conducted multiple-group analyses to test the applicability of the spillover model for boys and girls and for each of the four parent-child dyads. Analyses were conducted beginning with fully constrained models across groups. Next, a model was fit that allowed only the structural parameters to vary across groups. The fit of this model was compared with that of the fully constrained model. If the chi-square for the constrained model was significantly larger than the chi-square for the unconstrained model, group differences were evident, and an examination of critical ratios comparing structural parameters across groups was done to locate differences in pathways. Inequality in the strength of the parameters was indicated by critical ratio differences greater than 1.96 ($p < .05$).

**Results**

Bivariate associations among marital conflict, parenting behaviors, and indicators of youth maladjustment for the total sample are shown in Table 1 as well as descriptive statistics for each variable. There were significant associations between marital conflict and indicators of parenting and youth maladjustment and between parenting variables and youth maladjustment. All correlations were in the expected direction.

**Externalizing Problems**

Using structural equation modeling (SEM), the direct association between marital conflict and externalizing problems for the total sample at W1 was .19 and at W2 was .29. The direct effects model explained 20% of the variance in W2 externalizing problems, $\chi^2(df) = 55.62 (7), p < .001$. In the mediating model, pathways through parenting behaviors and pathways between parenting behaviors were added to the direct effects model as specified in Figure 1. Model fit was less than adequate, $\chi^2(df) = 225.15 (41), p < .001$; GFI = .93, AGFI = .88, CFI = .88, RMSEA = .09. Based on modification indices, three error terms were correlated to achieve an adequate fit: overt conflict at W1 and W2, W1 harsh discipline and W1 parent-youth conflict, W2 harsh discipline and W2 parent-youth conflict. Correlated error between the two measures of overt conflict reflects shared error associated with the same informant reporting on the same construct over time. Correlated error between harsh discipline and parent-youth conflict at both waves.
Table 1  
Correlations Between Marital Conflict, Parenting Behaviors, and Youth Maladjustment

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\[ M = 2.02 \quad 2.14 \quad 1.93 \quad 2.00 \quad 2.42 \quad 2.29 \quad 4.35 \quad 3.73 \quad 2.95 \quad 2.06 \quad 3.13 \quad 14.36 \quad 3.04 \quad 7.94 \]

\[ (SD) = (.80) \quad (.79) \quad (.56) \quad (.55) \quad (.61) \quad (.77) \quad (.96) \quad (1.07) \quad (1.52) \quad (.86) \quad (.99) \quad (3.58) \quad (.94) \quad (2.08) \]

Note: W1 = Wave 1; W2 = Wave 2. Correlations equal to or greater than .10 are statistically significant \((p < .05)\).
might indicate an underlying negative affective quality of the parent-child relationship that is not captured adequately by concepts in our model (i.e., parental hostility). Freeing up these three error terms resulted in a good fit of the model to the data, $\chi^2(df) = 133.23 \ (38), p < .001$; GFI = .96, AGFI = .92, CFI = .94, RMSEA = .07, representing a significant improvement in fit from the earlier model, $\chi^2 \Delta(df) = 91.92 \ (3), p < .001$. This model explained 36% of the variance in W2 externalizing problems.

Path coefficients for the best fitting model for externalizing problems are presented in Figure 2. Significant pathways are represented by solid lines, and nonsignificant paths are indicated by broken lines. As hypothesized, W1 marital conflict was associated with W1 externalizing problems through harsh discipline and parent-youth conflict. The Sobel (1982) test indicated that these pathways were significant, $t(549) = 3.57, t(549) = 5.67$, respectively). The direct effect between marital conflict and externalizing problems dropped from .19 to nonsignificance when parenting behaviors were included in the model. Thus, the association between W1 marital conflict and W1 externalizing problems was explained completely by harsh discipline and parent-youth conflict. W2 marital conflict also was associated with W2 externalizing problems through harsh discipline and parent-youth conflict. Sobel test indicated that these pathways were significant, $t(549) = 3.06, t(549) = 8.42$, respectively. The direct effect between marital conflict and externalizing behaviors dropped from .29 to .10, which was significant ($p < .05$). Thus, the concurrent association between marital conflict and externalizing problems at W2 was only partially explained by harsh discipline and parent-youth conflict.

Contrary to our hypothesis, marital conflict was not associated with externalizing problems through parental involvement at either wave of data. All constructs demonstrated significant stability over time. The two proposed cross-lagged effects also were supported, as indicated by the significant path between W1 marital conflict and W2 parent-youth conflict and between W1 externalizing problems and W2 parent-youth conflict.

**Multiple group comparisons.** Our next step was to examine how the spillover model held up for sons and daughters and across the four parent-child gender dyads. For the first analysis, we split the sample first by youth gender and estimated the model simultaneously for both groups. Comparison of the fully constrained model ($\chi^2 = 313.09, df = 119$) with the unconstrained model ($\chi^2 = 289.65, df = 98$) indicated no statistically significant difference between the two models ($\chi^2 \Delta = 23.44, df\Delta = 21, p > .05$). We concluded that the spillover model was similar for sons and daughters. Next, we examined the spillover model for parent-child gender. Comparisons of the fully con-
Figure 2
Process Relations Among Marital Conflict, Parent-Child Relations, and Youth Externalizing Problems

\( \chi^2 = 133.23 \) (df = 38), p < .001; GFI = .96, AGFI = .92, CFI = .94, RMSEA = .07

Note: GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.
strained model ($\chi^2 = 560.58, df = 272$) with the unconstrained model ($\chi^2 = 496.29, df = 212$) indicated no significant difference ($\chi^2\Delta = 64.29, df\Delta = 60, p > .05$), suggesting that pathways were similar across fathers and sons, fathers and daughters, mothers and sons, and mothers and daughters.

### Internalizing Problems

The direct association between marital conflict and internalizing problems at W1 was .25 and at W2 was .29, $\chi^2(df) = 50.13 (7), p < .001$. The direct effects model explained 15% of the variance in internalizing problems at W2. Addition of the pathways through parenting behaviors resulted in a model with less than adequate fit, $\chi^2 = 222.89 (41), p < .001$; GFI = .94, AGFI = .88, CFI = .86, RMSEA = .09. As was the case for externalizing problems, modification indices indicated that model fit could be improved by correlating error terms between W1 and W2 overt conflict and between harsh discipline and parent-youth conflict at both waves. Covarying these error terms produced a model with good fit, $\chi^2(df) = 134.56 (38), p < .001$; GFI = .96, AGFI = .92, CFI = .93, RMSEA = .07, reflecting a significant improvement from the earlier model, $\chi^2\Delta(df) = 88.33 (3), p < .001$. This model explained 23% of variance in W2 internalizing problems.

Path coefficients for the best fitting total model are presented in Figure 3. The association between W1 marital conflict and W1 internalizing problems was mediated partially through parent-youth conflict. Sobel (1982) tests indicated that this pathway was significant, $t(549) = 5.33$. Parent-youth conflict also was a significant mediator at W2, $t(549) = 6.19$. Contrary to our hypothesis, marital conflict was not associated with internalizing problems through parental involvement and harsh discipline at either wave. Only one proposed cross-lagged effect was supported (i.e., path from W1 marital conflict to W2 parent-youth conflict).

**Multiple group comparisons.** The chi-square difference test for youth gender indicated that the fully constrained model ($\chi^2 = 312.37, df = 119$) and the unconstrained model ($\chi^2 = 298.13, df = 98$) did not differ statistically ($\chi^2\Delta = 14.24, df\Delta = 21, p < .10$). Thus, spillover processes involving internalizing problems were similar for sons and daughters. Results of the chi-square difference test for parent-child dyads indicated that the fully constrained model ($\chi^2 = 560.99, df = 272$) and the unconstrained model ($\chi^2 = 499.16, df = 212$) did not differ ($\chi^2\Delta = 61.83, df\Delta = 60, p > .10$), suggesting that proposed pathways of association are similar across the four parent-child dyads.
Figure 3
Process Relations Among Marital Conflict, Parent-Child Relations, and Youth Internalizing Problems

\[ \chi^2 = 134.56 \ (df = 38), \ p < .001; \ GFI = .96, \ AGFI = .92, \ CFI = .93, \ RMSEA = .07 \]

Note: GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.
Discussion

The purpose of the current study was to extend empirical literature on marital conflict spillover processes by examining the associations among marital conflict, parent-child relations, and youth maladjustment longitudinally as youth transition from middle childhood to adolescence. Our multidimensional conceptualization of parent-child relations, coupled with the prospective design, allowed us to pinpoint specific aspects of the parenting environment that are affected by marital relations, to assess how these linkages evolve over time in relation to adolescents’ psychosocial development, and to identify youth characteristics that play a role in shaping and maintaining family processes that undermine adolescent development. Three central findings emerged from the current study, which we use as organizing points to frame our discussion.

First, marital conflict, parent-child relationship quality, and youth maladjustment are relatively stable from middle childhood to adolescence, and these individual sources of stability constitute important mechanisms by which negative family processes are maintained over time. Supporting findings by Acock and Demo (1999), we found that early marital conflict is a robust predictor of marital conflict assessed 5 years later after taking into account the simultaneous influence of several parenting dimensions. Results from the current study indicate that when marital conflict is established, it becomes a stable property of the marital relationship that sets some of the tone for interaction in the parent-child subsystem.

Aspects of the parent-child relationship also demonstrate stability over time, particularly harsh discipline and parental involvement. Thus, although parents demonstrate some degree of continuity in how they relate to their children over time, parent-youth conflict is not nearly as fixed as are marital conflict interaction patterns. However, under circumstances of frequent, hostile marital conflict, parent-youth interaction appears to take on a more rigid and predictable quality. Marital conflict has a stable influence on parents’ performance by increasing the likelihood of coercive control attempts and contentious interchanges with children.

Second, the current study indicates that when family processes are established, they endure over time. The stable mediational role of parent-youth conflict suggests that a primary avenue by which marital discord affects youth maladjustment is through increased tension and conflict in the broader family system. Parents who are maritally distressed appear to lack tolerance for dealing with the day-to-day challenges that children bring to family life. This frustration gets expressed through frequent nattering over children’s behavior and regular complaints by parents related to everyday matters.
Given the nature of our measure of parent-child conflict, it appears that children are responding to frequent attempts by parents to constrain their behavior, activities, and choices regarding friends, dress, and spending habits. Likely responses to parental control attempts are emotional distress and defiance, particularly during adolescence.

Although spillover from marital conflict to harsh discipline was stable across time, the impact of spillover in this form was limited to externalizing problems. This finding suggests modeling processes, or social learning that occurs through observation of significant others. Children whose parents manage conflict through contemptuous and aggressive behaviors might come to view dominance and intimidation as appropriate strategies for resolving social problems. In children and adolescents, this learning is manifested through negative behaviors such as bullying peers, cruelty to others, and disobedience at home and in school.

Another source of stability was the direct effect of marital conflict on internalizing problems at both waves of data. This finding is at odds with Acock and Demo (1999), who found that the direct influence of marital conflict subsides as children make the transition to adolescence. The researchers’ focus on global adjustment (a measure comprising items that assess externalizing and internalizing problems) might have masked this direct influence. Harold et al. (1997) also found a direct effect of marital conflict on internalizing problems after accounting for variance attributable to parent-child hostility, although this finding was limited to boys. Children might withdraw socially to distance themselves from parental disputes or they might experience emotional distress if they are unable to extract themselves from their parents’ problems. The direct effect might also reflect a mechanism unaccounted for in the current study that operates in conjunction with spillover processes. Davies et al. (2002) reported that parenting difficulties in the form of low parental warmth and poor behavioral control mediated the relationship between interparental conflict and children’s insecure attachment in the parent-child relationship, which, in turn, was a robust predictor of children’s internalizing problems. Future research should consider spillover processes with other postulated explanatory mechanisms.

The third central finding is that children play a significant role in sustaining spillover processes when they are established. The longitudinal association between children’s early externalizing problems and later parent-adolescent conflict suggests that children contribute to the maintenance of destructive family processes through noxious behaviors that increase friction in their everyday encounters with parents. The coefficient for the pathway between early child maladjustment and parent-youth conflict was not as strong as that reported by Acock and Demo (1999). This discrepancy is a
likely a result of different modeling approaches and our inclusion of additional parenting variables. However, the fact that this pathway emerged as statistically significant is noteworthy given the 5-year interval between data collection points.

Contrary to our expectation, parental involvement did not mediate the association between marital conflict and children’s maladjustment at either wave of data. Based on findings reported by Buehler and Gerard (2002), we hypothesized that parental involvement would be an important pathway of influence in the association between marital conflict and children’s maladjustment, particularly for youth in their middle childhood years. It is noted, however, that our operationalization of parental involvement focused specifically on parental behavior (i.e., time spent with children in various relational and social activities), whereas Buehler and Gerard relied on a measure that tapped behavioral and affective properties of parental involvement (i.e., items that assessed amount of time spent in various activities in addition to items that assessed how often parents praise children and show them affection). Given the apparent weight of these latter items as a link to marital conflict, it appears that lingering marital tension takes its toll on the affective quality of parent-child interaction rather than the amount of time parents are engaged in activity with children. This seems to occur through emotional distancing and the suppression of affectionate expressions.

Although the current investigation addressed several weaknesses inherent in much of the past research on spillover processes, it also has limitations. The measures used for the current study are based solely on parent report data, which potentially introduce bias into parameter estimates as a result of shared method variance. Although focal child data were collected at Wave 2, a limited pool of items is available to assess parenting constructs and youth maladjustment, particularly internalizing problems. Our data indicate that although some reporter bias is evident, it appears to be minimal. Among 66 possible error covariances, only a small percentage of these were significant (4.5%).

In addition, although the four-group analysis by parent and youth gender is important, this analysis was restricted by relatively small sample sizes (and thus low power). A reflection of this limitation is that some of the structural paths were different across groups in this analysis; however, these differences were not large enough to result in statistical differences at the overall model level of testing. We did not report or interpret these differences because the omnibus test was not statistically significant, and caution was used to avoid capitalizing on chance findings. Findings should be replicated using a larger sample before definitive conclusions are drawn about the interaction between parent and child gender in shaping spillover processes.
Finally, the NSFH contains a limited array of parenting variables that do not fully capture the complexity of the parenting environment. This prevents an examination of other important parenting dimensions that potentially serve as a link between marital conflict and youth maladjustment. The unavailability of items that assess inconsistent discipline and psychological control constitute important omissions given sound theoretical links between these aspects of parenting and adolescent development (Barber & Olsen, 1997). Although lax control and psychologically intrusive parenting have been found to mediate the association between marital conflict and children’s maladjustment in samples of pre- and early adolescents (Fauber et al., 1990; Gonzales et al. 2000), studies that explore these linkages with representative samples and longitudinal data are virtually absent from the literature.

Bearing these limitations in mind, the current study makes an important contribution to the literature by highlighting areas of specificity and stability in marital conflict spillover processes. From a practical standpoint, findings suggest that negative family processes should be addressed early to promote successful development and psychological wellness of adolescent children. Given evidence of mutual influence between parents and youth in the maintenance of destructive family dynamics, intervention for families who are maritally distressed should be aimed at both parents and children. Practitioners can facilitate positive change in the family system by coaching parents who are maritally distressed on how to monitor and self-regulate emotion to minimize negative spillover from the marriage and by helping parents generate strategies for responding to youths’ misbehavior that rely on discussion and reasoning rather than fighting or harsh punishment. Practitioners also can assist children in the midst of family turmoil by raising their awareness of how their own behavior affects the quality of interaction with parents. Future research can facilitate intervention efforts by identifying conditions that promote sensitive parenting and harmonious parent-child relationships in the context of marital difficulties.

References


