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The Longitudinal Influence of Coparenting Conflict on Parental Negativity and Adolescent Maladjustment

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Abstract

This study addresses two limitations of coparenting research: first, little research on coparenting has been conducted with families of adolescents, and second, there is little understanding regarding the child and family contexts in which coparenting is most salient. The longitudinal relation of coparenting conflict to parenting and adolescent maladjustment across 3 years was investigated among 516 2-parent, 2-adolescent families. Coparenting conflict predicted as much or more unique variance in parenting and adolescent adjustment as did marital quality and disagreement together. After controlling for stability, coparenting conflict predicted mothers' and fathers' negativity and adolescent antisocial behavior (but not depression). Importantly, the influence of coparenting conflict in all cases varied as a function of family type, adolescent gender, or initial level of antisocial behavior, or all. The implications of these results for family processes in different relational and developmental contexts are discussed.

Keywords

antisocial behavior; coparenting; depression; parenting

The relationship between parents can be a powerful influence on many aspects of family life and child adjustment. Coparenting, the way that parents coordinate their parenting of a child, is a component of the interparental relationship that does not include the parents' romantic, financial, sexual, or other relations that are not directly associated with parenting (McHale, Lauretti, Talbot, & Pouquette, 2002). Research on coparenting has demonstrated to date that coparenting is more predictive of parenting and child outcomes than is general marital quality, that coparenting accounts for variance in parenting and child outcomes after controlling for individual parent characteristics, and that coparenting predicts marital quality but not vice versa (see reviews in Feinberg, 2002, 2003). Unfortunately, understanding these links in greater depth has been difficult because coparenting is a multidimensional construct including agreement on childrearing principles, division of child-care labor, and mutual support. Moreover, most of the literature that has accumulated on coparenting has focused on the early phase of family life with infants and children (e.g., Belsky, Putnam, & Crnic,

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1996; Van Egeren, 2003). Thus, the importance of coparenting in families with adolescents is unclear.

This study focuses on one dimension of coparenting: disagreement and conflict over childrearing issues, abbreviated here as *conflict*. This dimension can be viewed as a basis for other aspects of coparenting (McHale et al., 2002). We examined whether coparenting conflict in families of adolescents predicts parental negativity and adolescent antisocial behavior and depression and whether its importance varies across families.

Associations of Coparenting Conflict With Parenting and Child Outcomes

Understanding the relations among coparenting conflict, parenting, and adolescent maladjustment is part of an effort to broaden the integration of family systems research within developmental psychopathology (see special issue of *Development & Psychopathology*, Vol. 16, 2004). In this article, we focus on the construct of parental negativity to represent parenting because researchers generally agree that negativity is among the first tier of important components of parenting behavior (Maccoby, 1992). Parental negativity has been associated with several domains of adolescent adjustment across a wide range of populations and groups (Hetherington & Clingempeel, 1992). In addition, we use the constructs of antisocial behavior and depressive symptoms to represent adolescent maladjustment. These two constructs represent the two broad domains of child psychopathology, namely, internalizing and externalizing disorders.

Coparenting versus the marital relationship—Given the conceptual overlap between the marital relationship and the coparenting relationship, it is important to justify a focus on coparenting in theorizing and data collection and possibly as an intervention target (Feinberg, 2002). Although the quality of coparenting and the overall couple relationship are probably linked through reciprocal associations (Margolin, Gordis, & John, 2001), coparenting distress is not equivalent to couple relationship distress, nor is coparenting positivity equivalent to couple intimacy. Further, the coparenting relationship has been more powerfully and proximally related to parenting, the parent-child relationship, and child outcomes than to other aspects of the couple relationship. For instance, researchers have found that the *parenting alliance*, not *marital adjustment*, was significantly associated with parenting style (Abidin & Brunner, 1995 and Bearss & Eyberg, 1998, obtained similar results regarding child problems). These and other findings (Floyd, Gilliom, & Costigan, 1998; Frosch, Mangelsdorf, & McHale, 2000) may partly justify the view of Margolin et al. (2001) that coparenting represents a *risk mechanism*, whereas general marital conflict or marital quality may represent a *risk indicator* (Rutter, 1994). In this context, we first examined whether coparenting conflict was a stronger predictor of parental negativity and adolescent antisocial behavior and depression than marital quality in families with adolescents.

Coparenting in families with adolescents—As already noted, most of the literature on coparenting conflict has focused on the early phase of family life with infants and children. For example, for parents of infants, one study found that coparenting conflict predicted child aggression 3 years later, controlling for individual and marital functioning (McHale & Rasmussen, 1998). Among parents of preschoolers, hostile coparenting relations mediated the association between marital violence and children's anxiety and depression (Katz & Low, 2004).

A few reports have begun to extend our understanding of the influence of coparenting to the preadolescent period (e.g., Brody & Flor, 1996; Margolin et al., 2001). A recent report using a sample of single African American mothers with preadolescent and early adolescent

offspring found that low levels of coparenting conflict between the mother and a coparental figure whom she identified (e.g., the grandmother) buffered girls from the negative effects of neighborhood violence (Forehand & Jones, 2003). A second report on this sample found that coparenting conflict fostered more negative and less consistent parenting, which in turn affected children's sense of security and impeded the development of self-regulatory skills (Jones, Shaffer, Forehand, Brody, & Armistead, 2003).

The evidence supporting the importance of coparenting conflict in families with younger children does not necessarily generalize to families with adolescent offspring. In the absence of substantial empirical evidence, developmental theory and research can be used to support arguments both for and against the proposition that coparenting conflict remains a salient influence on parenting and adolescent adjustment. On the one hand, adolescent offspring disengage to some extent from their parents and spend more time with peers. It may be that as children grow into adolescents and disengage somewhat from family life, the sphere in which close interparental coordination is required, contracts and coparenting conflict become less important (Margolin et al., 2001).

On the other hand, coparenting relations may be more important for families with adolescents than for families with younger children. In an early description of the parental alliance, scholars pointed out that positive coparenting may provide a foundation of consistency and support in the families that is crucial for adolescent development (Weissman & Cohen, 1985). Parents' ability to provide a cohesive family framework may be highly tested while under the onslaught of adolescent strivings for independence and control. With more advanced cognitive and relational skills, adolescents are better equipped than children to instigate and foster triangulation and parent-child coalitions, thereby promoting coparenting conflict with attendant effects on parenting. In addition, the emergence of new claims and social realities regarding adolescent autonomy requires parents to respond to new issues, as well as to readjust their responses to old issues. To the extent that parents are able to resolve and minimize coparenting conflict and thus maintain a cohesive stance amid these changes, they will be able to provide a consistent base that supports parental adjustment, parenting, and adolescent development (Weissman & Cohen). Thus, this study builds upon previous research with younger children to address the question of whether coparenting conflict matters in families with *adolescents* for both parental negativity and adolescent maladjustment.

Direction of effects—Even if coparenting conflict is associated with parenting and adolescent adjustment independent of marital quality, models of family process require specification of the causal direction of effects, which is best addressed with either experimental or longitudinal data. Without evidence of causal influence, the usefulness of such models for informing intervention strategies is reduced. The longitudinal importance of the quality of the coparenting relationship in predicting parenting, marital relationships, and child outcomes has been documented for families with infants and toddlers (McHale & Rasmussen, 1998; Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004) and for families with offspring in middle childhood or preadolescence (Forehand & Jones, 2003). This study examined whether these associations held among families of adolescents.

Moderators of the Influence of Coparenting Conflict

The second gap in the literature on coparenting addressed here is a lack of attention to the conditions under which coparenting conflict is more or less salient for parenting or child adjustment. For example, factors that might moderate the influence of coparenting conflict include adolescent characteristics (e.g., maladjustment, birth order, and gender) and family characteristics (e.g., nondivorced vs. stepfamily status). If researchers can understand

whether coparenting conflict is more or less important for particular types of families or adolescents, preventive and treatment interventions can be more appropriately and sensitively targeted.

Building on the view that coparenting conflict represents a risk factor for parental negativity and adolescent maladjustment, a risk and resilience framework guided our hypotheses regarding variation in the salience of coparenting as a function of adolescent characteristics and family type. Studies that have examined the coaction of multiple risk factors over development generally suggest that there is a cumulative effect of risk above and beyond the additive effects of individual risk factors (e.g., Pollard, Hawkins, & Arthur, 1999). Thus, coparenting conflict as a risk factor should have the strongest effects in combination with other risks, for example, adolescents' disruptive, noncompliant, and antisocial behavior (Reiss, Neiderhiser, Hetherington, & Plomin, 2000). Through a transactional lens, such adolescent characteristics evoke high levels of parental negativity (e.g., Bell & Chapman, 1986). Simultaneous adolescent antisocial behavior and coparenting conflict may create a particularly stressful context for parents, leading to compromised parenting behaviors such as harsh and inconsistent punishment. We therefore predicted that adolescent antisocial behavior and coparenting conflict would interact in predicting parental negativity.

A risk and resilience perspective also led us to hypothesize that coparenting conflict would have the most negative implications for adolescents who show initial signs of oppositional, disruptive behaviors. Although youth demonstrate poor adjustment for a variety of reasons, initially maladjusted youth may be more sensitive and reactive to risk factors, including interparental conflict. Moreover, such youth may have fewer individual resources—and may be less likely to elicit or recruit support from others—that would help protect them from disturbances in family process (Anan & Barnett, 1999).

Adolescent birth order and gender were also examined as potential moderators of coparenting conflict. On the one hand, research has generally demonstrated small, inconsistent, or no effects of birth order on child adjustment. On the other hand, recent evidence suggests that parents may learn from their experiences (and mistakes) with first-born offspring (Whiteman & Buchanan, 2002). If so, parents may learn from family processes centering on the older sibling how to insulate the parent-adolescent relationship from coparenting conflict and demonstrate this buffering more competently with the younger sibling. If this is the case, then the influence of coparenting conflict on parenting should be diminished for younger born adolescents. In contrast, it is also possible that the chronic stress of managing and containing coparenting conflict wears down regulatory controls, and parents are less able to buffer the younger sibling from the effects of coparenting conflict. Our approach to studying birth order as a moderator of coparenting conflict was therefore largely exploratory.

Two lines of research inform our hypotheses regarding the influence of coparenting conflict as a function of adolescent gender. First, many more girls than boys display internalizing symptoms during adolescence (Zahn-Waxler, 1993). Thus, the effect of coparenting conflict may be strongest on boys' externalizing symptoms and girls' internalizing symptoms, as these may be the preferred biosocial channels through which distress is manifest (Kessler, 2000; Nolen-Hoeksema, 2001). Second, research on the effects of marital conflict on children's behavior suggests that boys may be more vulnerable than girls (O'Leary & Vidair, 2005). This difference reverses in adolescence when girls appear to become more reactive (see discussion in Davies & Lindsay, 2004).

Moreover, the combined effect of coparenting conflict and adolescent maladjustment may be partly dependent on adolescent gender. For example, given that antisocial behavior (vs.

internalizing behavior) is more typical of boys than of girls, it may be that high levels of antisocial behavior in girls elicit greater levels of hostile parenting than do high levels of antisocial behavior in boys. Such a gender-associated pattern may emerge most strongly when parents are also dealing with the stress of coparental conflict. These predictions led us to examine the three-way interactions among coparenting conflict, initial (Wave 1) adolescent antisocial behavior, and adolescent gender in predicting parental negativity and adolescent maladjustment.

Finally, family context and history may influence the salience of coparenting. Analyses comparing the family functioning of stepfamilies to nondivorced families in the current sample have shown that, consistent with other research, stepparents are less warm and involved and, particularly for stepfathers, more negative with their nonbiological offspring (Hetherington et al., 1999). Given such characteristics, as well as a history of divorce, stress involved in the integration of separate households, strains regarding the incorporation of a new parent in a parenting role, and the potential for ongoing conflict with exspouses (Hetherington et al.), stepfamily status can be considered a marker of risk. Moreover, many stepchildren have lived through marital conflict and divorce previously, and research indicates that prior exposure to interadult conflict sensitizes children to future conflict (Cummings, Pellegrini, Notarius, & Cummings, 1989). As such, we expected that coparenting conflict would have relatively more negative effects on parenting and adolescent maladjustment in stepfamilies.

The Current Study

In this study, the significance of coparenting conflict for parenting and adolescent maladjustment was examined. We first examined whether parents report that disagreements around coparenting comprise a substantial portion of marital conflict and whether the salience of coparenting differs by family type. Second, we investigated whether coparenting predicted unique variance in parental negativity and adolescent maladjustment above general marital quality and disagreement. Third, we assessed whether coparenting conflict predicted parental negativity and adolescent antisocial behavior and depression over 3 years, controlling for stability in parental negativity and adolescent maladjustment. In these analyses, we explored the moderating influence of initial level of adolescent antisocial behavior, birth order, gender, and family status.

Method

The data for this study were from the Nonshared Environment in Adolescent Development project (Reiss et al., 1995), a multimethod, multimeasure study designed to investigate the role of nonshared environmental factors on adolescent development. The overall sample consists of 720 families with heterosexual, married parents and same-gender adolescent sibling pairs approximately evenly divided by gender (51.6% boys). To be included in the sample, each family must have had two children of the same gender, no more than 4 years apart in age, and no younger than 9 or older than 18 (older child $M = 14.5$, $SD = 2.2$; younger child $M = 12.9$, $SD = 2.2$). The tested siblings had to be residents in the household at least half of each week. Families comprised a varied sample of monozygotic and dizygotic twins in nondivorced families, full siblings from nondivorced and stepfamilies, half siblings, and genetically unrelated stepsiblings. Stepfamilies were matched to nondivorced families by income and education. All the stepfamilies were in existence at least 5 years prior to the start of the study, to ensure that they were no longer in the unstable phases of family formation. In the analyses conducted for this study, 204 twin families (28% of the total sample) were excluded, leaving an initial Wave 1 sample of 516 families.

Families were sampled by means of random digit dialing and commercial market panels to identify certain family types. The resulting sample contained families from 47 states. Mean family income was in the range of \$25,000 – \$35,000, with 12% of families below \$20,000 and 32% above \$50,000 (all figures were reported in mid-1990s and have not been adjusted for inflation). Mean years of education was 13.6 for mothers and 14.0 for fathers. Seven percent of mothers and 10% of fathers did not graduate high school; 51% and 55% of mothers and fathers, respectively, obtained at least some postsecondary school education. Most of the sample (94% of mothers and 93% of fathers) was European American, and the remainder consisted of a variety of other ethnic groups.

Data collection was conducted by the National Opinion Research Center, a social survey research organization at the University of Chicago. Interviewer teams ($N = 37$), under the supervision of four field managers, conducted all interviews in the families' homes. Data were collected in two sessions, with each session lasting approximately 3 hours, separated by no more than 2 weeks. A set of questionnaires was given to each family after the first interview session, with instructions to complete them before the second session.

Interviewer teams also collected videotaped interaction of all dyads and triads in each family. Observers coded the 10-minute parent-child interactions, in which the dyad discussed and attempted to resolve differences of opinion regarding family issues. Videotape coding used a global coding system of 5-point Likert scales adopted from previous research (Hetherington & Clingempeel, 1992). Undergraduate and graduate students comprised the coding team. One experienced coder served as a criterion coder. Extensive training consisted of studying the training manual and ongoing coding tutorial sessions. More than 20% of the dyadic interactions were coded for reliability, and reliability checks were ongoing throughout the study.

Data were collected 3 years later using the same measures and procedures. Of the original 720 families in the full sample at Wave 1, 434 (60%) qualified for participation at Wave 2. The reasons for ineligibility at Wave 2 included divorce (15% of ineligible families), one or both adolescents moved out of the home (79%), and unable to be classified (6%). Only 9% of the 434 eligible families refused to participate. This resulted in 395 families that participated at Wave 2. Analyses of Wave 1 scale means for the Wave 2 participating versus ineligible versus refusing families demonstrated considerable similarities, although some measures did show significant differences. Both siblings were younger in participating families than in the other groups, and their parents were younger than parents in the ineligible families. This finding is not surprising, given that older adolescents were more likely to have become independent and moved out of the house by Wave 2, resulting in their family being ineligible for further study. Participating older children were significantly more antisocial than in the refusing families, but no other significant adjustment differences were found.

After excluding twin families, the final Wave 2 sample for this study was 259. Only the measures of parenting and adolescent adjustment at Wave 2 were used in these analyses. Reliability coefficients reported are for the whole sample (720 families) for Wave 1. Comparison of the reliability coefficients for the subsample used in this study with the whole-sample figures revealed no substantial differences.

Measures

Composite ratings of adolescent adjustment and parental negativity were formed across all raters (parent, adolescent, and observation) available. Scales comprising each composite were standardized and summed using unit weights. These component scales are described below; further details can be found in previous reports (Hetherington et al., 1999; Reiss et

al., 1995). Internal consistency coefficients for the composites, with the scales considered as items, ranged from .71 to .87.

Adolescent adjustment—In the current study, indexes of adolescent adjustment were antisocial behavior and depressive symptoms. Differences among adolescents were measured on a continuous scale in each domain.

Antisocial behavior was measured by adolescent and parent reports on a six-item subscale from the Behavior Problems Index (Zill, 1985), adapted from the Child Behavior Checklist (Achenbach & Edelbrock, 1983), and a nine-item subscale from the Behavior Events Inventory (Hetherington & Clingempeel, 1992; adapted from Patterson, DeBaryshe, & Ramsey, 1989). Cronbach's alphas on these measures ranged from .37 to .78 (low numbers were obtained on the Behavior Events Inventory and resulted from a dichotomous yes-no response format). Antisocial behavior was also measured by observation: Videotapes of child behavior within dyadic family interactions were coded globally on a 5-point scale for disruptive, rude, coercive, and aggressive behavior. Inter-rater reliability for this code was .69.

Depressive symptoms were measured via three indicators. Adolescents reported on the Child Depression Inventory (Kovacs, 1985), which consists of 27 items relating to various affective and vegetative signs of depression within the past 2 weeks. Mothers and fathers completed a comparable version of the Child Depression Inventory for each child. Cronbach's alpha ranged from .83 to .87. Adolescent and parent reports were also included on the six-item depression subscale of the Behavior Problems Index and the depression subscale of the Behavior Events Inventory, which inquired into depressive behaviors over the past week. Alphas on these measures ranged from .72 to .77. Global depressed mood was also rated on a 5-point scale by the trained observers viewing the videotaped interactions; inter-rater reliability was .75.

Parenting—Parent-child conflict or negativity was found to be a distinct construct in previous research (Steinberg, 1990) and through factor analysis of the data from this study. Parents and adolescents completed the disagreement, punitiveness, and yielding to coercion subscales of the Parent Discipline Behavior Inventory (Hetherington & Clingempeel, 1992). Cronbach's alphas on these measures ranged from .57 to .73. Parents and adolescents also completed the symbolic aggression subscale of the Conflict Tactics Scale (Straus, 1979; alphas ranged from .72 to .95) and the conflict subscale of the Parent-Child Relationships Scale (Hetherington & Clingempeel; numbers ranged from .72 to .78). Observer's ratings of parental negativity were comprised of the mean of codes for anger or hostility, coercion, and transactional conflict. For these three negativity codes, exact inter-rater agreement ranged between 75% and 80%, weighted Kappa's ranged between .69 and .74, and average correlations across codes ranged between .78 and .81.

Marital disagreement and marital quality—Parents reported on marital relationships with the Locke-Wallace Marital Adjustment Test (Locke & Wallace, 1959). The Marital Disagreement Scale is comprised of eight items that focus on how frequently the couple agrees or disagrees. Items are measured on a 6-point Likert scale ranging from *always agree* to *always disagree* and ask about agreement in various domains, such as handling family finances, friends, sex relations and philosophy of life. The alpha ranged from .82 to .83 for mothers and fathers. The Marital Quality Scale is comprised of six items that focus on cohesion and communication, with alphas ranging from .68 to .72. Mother-father correlations were .46 for marital disagreement and .49 for marital quality.

Coparenting conflict—Parents reported on the extent of coparenting conflict on the Child Rearing Issues: Self and Spouse Scale (Hetherington & Clingempeel, 1992). This is a different measure from the one used to assess childrearing disagreement by Hetherington et al. (1999). The scale consisted of 39 items that assessed frequency and intensity of arguments or disagreements between spouses over childrearing issues on a 6-point Likert scale. Each parent reported on conflict with the spouse regarding each child. Thus, there were four parallel scales of coparenting conflict: each parent's report of coparenting conflict concerning each sibling. Alpha ranged from .87 to .89 for the four scales. Mother and father reports were correlated, $r = .35$ and $r = .33$ for conflict regarding the older and younger child, respectively. In some analyses, a mean score for mothers' and fathers' report of coparenting conflict regarding a child was used to reduce the number of variables in models and to simplify creation of interaction terms.

In addition, parents rated the subjective intensity of conflict regarding each of 23 topics engendered in the marriage over the past month. They were then asked to select the topics that were the first, second, and third most frequent source of arguments. These responses were coded as pertaining to child-related issues versus all other issues.

Results

Salience of Coparenting Conflict

The ratings of subjective intensity of sources of marital conflict revealed that child-related issues represented the number one source of marital conflict for 47% of mothers and 47% of fathers. An additional 22% of mothers and 20% of fathers said that child-related issues were the second-rated topic, and 15% of mothers and 13% of fathers rated it third.

We also examined the mean level of conflict reported on the Child Rearing Issues Scale by family type (nondivorced vs. stepfamilies). Mothers in nondivorced families (older sibling: $M = -0.15$, $SD = 0.82$; younger sibling: $M = -0.13$, $SD = 0.87$) reported less conflict than those in stepfamilies (older sibling: $M = 0.11$, $SD = 1.04$; younger sibling: $M = 0.07$, $SD = 1.04$) with respect to both adolescents, older sibling: $t(1, 164) = -2.68$, $p < .01$ and younger sibling: $t(1, 159) = -1.97$, $p = .05$. Although the difference was in the same direction for fathers, that comparison was not significant. Observation of the mean difference with respect to the standard deviations indicated that the differences, even for mothers, were small. Overall, then, stepmothers experienced slightly higher levels of coparenting conflict than nondivorced mothers.

Coparenting Conflict Versus Marital Quality or Disagreement

Correlations between coparenting conflict and marital disagreement and between coparenting conflict and marital quality were low (around .2 or less; Table 1), suggesting that the independent effects of marital quality and coparenting conflict on parental negativity and adolescent maladjustment could be discerned. A series of longitudinal, hierarchical regression analyses were conducted to examine the predictive value of coparenting conflict at Wave 1 for maternal and paternal negativity and adolescent antisocial behavior and depression at Wave 2. By including marital disagreement and quality at Wave 1, these analyses revealed the unique variance attributable to coparenting conflict. Mother and father variables were included in the same model. Both mothers' and fathers' ratings of marital disagreement and quality were entered in the first step of the regressions; both mothers' and fathers' ratings of coparenting conflict were added in the second step. Finally, these—and all analyses in this article—used two-tailed tests of significance.

As shown in Table 2, the amount of unique variance accounted for by coparenting conflict was larger or in some cases about the same as the amount of variance accounted for by the two marital variables in Step 1. Mothers' and fathers' reports of coparenting conflict generally predicted similar amounts of variance (not shown).

Coparenting Conflict and Moderators Predicting Parental Negativity and Adolescent Maladjustment

The next set of analyses focused on the main effects and moderators of coparenting conflict at Wave 1 in predicting parental negativity and adolescent antisocial behavior and depression at Wave 2. Random intercept multilevel models (SAS Proc Mixed) were used, which allowed us to include both older and younger siblings in the same analysis and avoid inflation of significance values as a function of clustering of siblings within a family. Mothers' and fathers' negativity were analyzed as dependent variables in separate models, as were adolescent antisocial behavior and depressive symptoms, yielding four models.

The Wave 1 score of the dependent variable was included in each model to control for stability in the dependent variable; thus, regression coefficients estimate change in the dependent variable from Wave 1 to Wave 2. Included in all initial models were family status (nondivorced vs. stepfamily, with the latter as the reference group), birth order (older siblings are the reference group), and adolescent gender (girls are the reference group). Given our hypotheses, we included the two-way interactions formed by coparenting conflict with family status and birth order and the three-way interaction between coparenting conflict, antisocial behavior, and adolescent gender. As a standard practice, we also included all lower order terms (i.e., Coparenting Conflict $\times$ Antisocial Behavior and Coparenting Conflict $\times$ Adolescent Gender). To facilitate interpretation of interactions, the adolescent adjustment and coparenting conflict variables were centered. The average of mothers' and fathers' reports of coparenting conflict was used in these analyses.

Analyses were conducted with a backward elimination process, beginning with the highest order interaction terms, to provide simplified models and to avoid nonsignificant predictors in the final model (as may occur with forward selection). We proceeded to drop terms from the model until only significant terms (as well as the lower order terms of variables involved in a significant interaction) were included, as well as coparenting conflict even if not significant.

Models predicting parental negativity—For models predicting mothers' and fathers' negativity, adolescent antisocial behavior at Wave 1 was included both to control for child effects and as a potential moderator in an interaction term with coparenting conflict. Thus, these analyses were conservative because it is possible that coparenting conflict partly mediated stability in negativity and maladjustment.

Results are presented in Table 3. As predicted, there were significant three-way interactions of Coparenting Conflict $\times$ Antisocial Behavior $\times$ Adolescent Gender for both mothers' and fathers' negativity. To interpret significant interactions, plots were created using the final model beta weights (Cohen, Cohen, West, & Aiken, 2003). Regression lines were plotted for one standard deviation below and above the mean of constituent variables (Figures 1 and 2). The plots of the interactions indicated that low antisocial girls in families with high levels of coparenting conflict received much higher levels of maternal and paternal negativity (at Wave 2, controlling for Wave 1) than did the corresponding low antisocial boys. In fact, low antisocial girls in high coparenting conflict families received about as much negativity from mothers and fathers at Wave 2 as did high antisocial girls.

A second interaction term was significant for fathers' negativity—that between coparenting conflict and family status. The plot (not shown but produced by considering all other variables at their respective mean values) indicated that in the presence of low coparenting conflict, fathers were equally negative in nondivorced and stepfamilies. In contrast, with increasing coparenting conflict, the regression lines diverged: Stepfamily fathers became more negative, whereas fathers in nondivorced families became less negative. Therefore, in line with our hypotheses, coparenting conflict was linked to increased father negativity in stepfamilies. Coparenting conflict, however, was associated with diminished paternal negativity 3 years later among nondivorced families.

The lower order main effects and interaction terms comprising the three- and two-way interactions just discussed (italicized in the table for convenience) are not interpreted, as those results are qualified by the higher order interactions. Contrary to prediction, interactions of coparenting conflict with birth order were not significant; thus, those variables are not included in the final models. The results for Wave 1 negativity are significant and the beta is large, indicating a high level of stability in both parents' negativity.

Models predicting adolescent maladjustment—For models predicting adolescent antisocial behavior and depressive symptoms, mothers' and fathers' negativity at Wave 1 were both entered as control variables. Results are presented in Table 4.

For antisocial behavior, an interaction between coparenting conflict and Wave 1 antisocial behavior was significant. The plot of this interaction term (Figure 3) revealed that increased coparenting conflict was associated with a higher level of antisocial behavior at Wave 2 for adolescents who scored low on antisocial behavior at Wave 1 but was unrelated to change in antisocial behavior for adolescents who scored high in antisocial behavior at Wave 1. Thus, contrary to our hypothesis, coparenting conflict had more negative implications for more well-adjusted adolescents, rather than for less well-adjusted adolescents. This interaction did not vary as a function of adolescent gender (i.e., the three-way interaction was not significant). Additionally, interactions of coparenting conflict with birth order, gender, and family status were not significant; thus, those variables are not included in the final model.

For depressive symptoms, in contrast to our hypotheses, neither main effects nor interaction terms for coparenting conflict, birth order, and family status was significant. The main effect of adolescent gender was significant, indicating that girls were elevated on depression compared to boys. We note that the result for the Wave 1 score of depressive symptoms indicated a large degree of stability in depressive symptoms, which may have left little variance to predict. Table 5 summarizes the main findings of the study.

Discussion

This article examined coparenting conflict in two-parent families with adolescents, filling a gap in the literature, which has focused on coparenting in developmentally younger families. We used multiple method – aggregated indexes of parenting and adolescent adjustment to minimize single-reporter source bias. With these measures, we examined the unique influence of coparenting conflict on parental negativity and adolescent antisocial behavior and depressive symptoms after accounting for marital quality and disagreement. We also investigated the adolescent and family characteristics that moderate the salience of coparenting conflict.

In this national sample, parents reported that childrearing issues are a central source of marital conflict. Moreover, in line with previous research and our hypotheses, coparenting

conflict accounted for just as much or more variance in parental negativity and adolescent maladjustment as marital disagreement and quality combined. This link between coparenting and parenting and adolescent adjustment is consistent with research findings for developmentally younger families (Bearss & Eyberg, 1998; Frosch et al., 2000), and the findings confirm the importance of a research and intervention focus on coparenting as a construct distinct from the overall marital or couple relationship.

Predicting Parental Negativity and Adolescent Maladjustment

Having developed some degree of assurance regarding the salience and distinctness of coparenting conflict, we addressed the question of whether coparenting conflict predicted parental negativity and adolescent maladjustment over 3 years. The findings revealed that coparenting did predict parental negativity and adolescent antisocial behavior over time but that the effects of coparenting frequently depended on several other factors. The exception, discussed below, is that coparenting did not significantly predict adolescent depression.

Parental negativity—As predicted by the risk factor framework, stepfamily status was linked to the association between coparenting conflict and parental negativity, at least for fathers. Given the normative strains in stepfamilies regarding parental roles (Hetherington & Stanley-Hagan, 1999), elevated levels of coparenting conflict may be indicative of unsuccessful integration of the stepparent, most often the father, into an authoritative but warm parental role.

That coparenting conflict was associated with diminished paternal negativity 3 years later among nondivorced families was not predicted. This finding can be best understood within a view of family conflict as adaptive (e.g., Feinberg, Howe, Reiss, & Hetherington, 2000). For example, a transition to parenthood intervention increased couple conflict at an early stage of parenthood, but this conflict seemed to be an adaptive means of addressing new challenges as intervention couples later were better adjusted (Cowan & Cowan, 1992). Guided by this view of conflict, we suggest that though stressful in the short term, coparenting conflict in nondivorced families with young adolescents promotes problem solving and stage-appropriate family reorganization, which contribute to positive family relationships in the future.

The hypothesized interaction among coparenting conflict, adolescent antisocial behavior, and gender also significantly predicted parental negativity. For both mothers' and fathers' negativity, girls who were initially low on antisocial behavior but whose parents engaged in a high level of coparenting conflict received higher levels of parental negativity at Wave 2 than did boys low on antisocial behavior; these boys received low levels of negativity even in the face of coparenting conflict. There are two primary interpretations of this finding that are not mutually exclusive. First, adolescent girls' orientation toward relationships may leave them not only more open to greater emotional support and connection but also to greater conflict and negativity (Davies & Lindsay, 2004). Research suggests that adolescent girls react with more hostility to parents when exposed to interparental conflict (Schulz, Waldinger, Hauser, & Allen, 2005). Given the transactional nature of parent-child negativity (Bell & Chapman, 1986), girls' greater hostility may evoke greater negativity in parents. Thus, our results indicate that *spillover* from one family subsystem (coparental) to another (parent-adolescent) is stronger for adolescent daughters than for sons and may be partly mediated by adolescent reactivity.

Second, the stronger links between coparenting conflict and parenting toward adolescent daughters versus sons may have roots in parents' cognitions about gender. For example, to the extent that parents hold attitudes of gender inequality (Calasanti & Bailey, 1991), parents may be more likely to express anger, resentment, and hostility toward the lesser-valued

daughter than toward the more-valued son. Hostile reactions from girls may also be more discrepant with parental expectations for female behavior and thus may elicit greater levels of parental negativity in return. Research on the intersection of parents' gender attitudes and differences in within-family parenting is needed to clarify the extent to which this second interpretation is accurate.

The finding of greater parental negativity toward daughters than toward sons in the context of coparenting conflict was found for low antisocial adolescents, not for high antisocial adolescents as predicted. It may be that a ceiling effect prevented the detection of increased levels of parental negativity in families where adolescents initially exhibited high antisocial behavior, as parental negativity toward antisocial adolescents may already be high.

Adolescent maladjustment—In predicting adolescent antisocial behavior, the influence of coparenting conflict depended on the adolescent's initial level of antisocial behavior but in a direction contrary to our prediction: Adolescents exhibiting low antisocial behavior experienced the predicted effect of coparenting conflict on antisocial behavior over time. Again, one could argue that a ceiling effect prevented the detection of an effect for high antisocial adolescents. Although a ceiling effect is usually methodological, implying that the measure used was not sensitive to individual differences at high levels of antisocial behavior, this ceiling effect may have been substantive: At elevated levels of adolescent antisocial behavior and consequent family disruption, coparenting conflict may not further exacerbate adolescent maladjustment. It may also be that few families with antisocial adolescents are able to avoid coparenting conflict, thus reducing variability.

Although we expected coparenting conflict to predict adolescent depressive symptoms, the lack of significant findings in these models is consistent with the literature on interparental conflict generally, which has found that such conflict is linked to children's externalizing problems but weakly and inconsistently related to depressive symptoms (Feinberg, 2003). There may be several reasons for this lack of association, including the increased importance of peer relations and school and neighborhood contexts for depression in mid- to late-adolescence (Burton, Stice, & Seeley, 2004).

Birth order did not moderate the influence of coparenting conflict in predicting parental negativity and adolescent maladjustment. The nature of our coparenting measure may have restricted our ability to detect birth order moderation, as other coparenting constructs, such as triangulation, may display stronger developmental trajectories (Margolin et al., 2001).

Limitations

Although this study used a large sample drawn from across the United States, one of the important methodological limitations has to do with the focus on coparenting conflict. Coparenting warmth was not studied, nor was other aspects of coparenting (Cowan & Cowan, 2000; Feinberg, 2003; McHale, 1995). This approach was driven by the availability of measures in a large study that had other primary aims. Nonetheless, given that coparenting, and more generally interparental conflict, has shown consistent links with parenting and child adjustment (Buehler et al., 1998; Mahoney, Jouriles, & Scavone, 1997; Owen & Cox, 1997) and that other dimensions such as coparenting warmth have not always been found to predict child adjustment (e.g., Katz & Low, 2004), the use of coparenting conflict is not without merit.

In addition, our longitudinal analyses would have been strengthened had we been able to examine multiple waves of data. Nonetheless, the presence of two waves of data, and the use of controls for initial levels of dependent variables at the first wave, extends our

understanding of the influence of coparenting on family life beyond cross-sectional associations.

Finally, generalizations from this study are limited by the study's sample. Although the national sample was recruited through random digit dialing, procedures and eligibility requirements resulted in a sample that underrepresented low-income segments of the population. Still if the sample is not completely representative of the national population, the efforts taken through national recruitment led to a wide range of risk represented.

Conclusions

The findings here allow us to expand a view of coparenting as salient across childhood and, with these results, adolescence. In longitudinal models, evidence emerged that coparenting conflict was linked to later parental negativity and antisocial behavior even after accounting for marital disagreement and quality and after accounting for stability in the outcomes. Moreover, understanding the influence of coparenting conflict requires acknowledgment of adolescent and family characteristics, including adolescent gender and nondivorced versus stepfamily status. The effects of coparenting conflict on later adolescent and family functioning also depend on initial levels of adolescent adjustment. This set of findings sets the stage for the development of practices and policies that take into account the contexts and processes through which coparenting conflict affects the functioning of family systems and adolescent maladjustment.

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Figure 1. Three-Way Interaction Between Antisocial Behavior, Coparenting Conflict, and Adolescent Gender Predicting Mothers' Negativity at Wave 2.

Figure 2.
Three-Way Interaction Between Antisocial Behavior, Coparenting Conflict, and Adolescent Gender Predicting Fathers' Negativity at Wave 2.

Figure 3.
Interaction Between Coparenting Conflict and Adolescent Antisocial Behavior at Wave 1
Predicting Adolescent Antisocial Behavior at Wave 2.

Table 1

Correlations Among Study Variables

	1. W1 CC	2. W1 MD	3. W1 MQ	4. W1 AA	5. W2 AA	6. W1 AD	7. W2 AD	8. W1 PN	9. W2 PN
1. W1 CC		.21	-.22	.32	.26	.23	.15	.31	.20
2. W1 MD	.21		-.95	.11	.17	.09	.15	.18	.14
3. W1 MQ	-.22	-.95		-.14	-.19	-.10	-.14	-.21	-.17
4. W1 AA	.30	.16	-.16		.64	.43	.34	.62	.50
5. W2 AA	.19	.17	-.16	.64		.33	.41	.50	.66
6. W1 AD	.18	.09	-.10	.43	.33		.62	.38	.27
7. W2 AD	.16	.07	-.10	.34	.41	.62		.30	.37
8. W1 PN	.37	.21	-.22	.57	.44	.38	.27		.67
9. W2 PN	.33	.19	-.19	.47	.57	.24	.36	.63	

Note: Correlations for mothers appear above the diagonal and those for fathers appear below the diagonal. All correlations .09 and above are statistically significant at $p < .05$. AA = adolescent antisocial behavior; AD = adolescent depression; CC = coparenting conflict; MD = marital disagreement; MQ = marital quality; PN = parental negativity; W1 = Wave 1; W2 = Wave 2.

Table 2
Parental Negativity and Adolescent Maladjustment at Wave 2 Predicted by Mothers' and Fathers' Reports of Marital Disagreement, Marital Quality, and Coparenting Conflict at Wave 1

	Mothers' Negativity			Fathers' Negativity			Adolescent Antisocial Behavior			Adolescent Depression		
	B	ΔR^2		B	ΔR^2		B	ΔR^2		B	ΔR^2	
Older sibling												
Step 1												
M marital disagreement	0.23	.05*		-0.41	.05*		-0.51	.05*		-0.54	.02	
F marital disagreement	-0.68			0.05			-0.20			0.78		
M marital quality	-0.57			0.02			-0.23			0.03		
F marital quality	0.44			-0.26			0.14			-0.65		
Step 2												
M coparenting conflict	0.29 [†]	.07**		0.25 [†]	.07**		0.69**	.10**		0.30	.03*	
F coparenting conflict	0.55**			0.51**			0.55**			0.34		
Younger sibling												
Step 1												
M marital disagreement	0.62	.05*		0.24	.05*		0.57	.05*		-1.12 [†]	.05*	
F marital disagreement	-0.79			-0.52			-0.78			1.00		
M marital quality	-0.77			-0.42			-0.67			0.59		
F marital quality	0.42			0.13			0.20			-1.11 [†]		
Step 2												
M coparenting conflict	0.42*	.07**		0.14	.11**		0.56**	.04*		0.39 [†]	.05**	
F coparenting conflict	0.36**			0.64**			0.10			0.35*		

Note: Each model contains mothers' and fathers' reports for each construct entered in each step. Thus, Step 1 in the first column represents four variables: both mothers' and fathers' reports of marital disagreement and quality entered together as a set. All tests were two tailed. F = father; M = mother.

[†] $p < .10$.

* $p < .05$.

** $p < .01$.

Table 3
Final Model With Coparenting Conflict, Adolescent Antisocial Behavior, Adolescent Gender, and Family Status Predicting Mothers' and Fathers' Negativity at Wave 2

Predictor	Mothers' Negativity			Fathers' Negativity		
	B	SE	t	B	SE	t
Intercept	0.25	0.14	1.83	0.31	0.14	2.16*
Negativity at Wave 1	1.22	0.11	11.17**	1.00	0.10	9.76*
<i>Adolescent antisocial behavior</i>	0.09	0.06	1.51	0.11	0.06	2.00*
<i>Coparenting conflict</i>	0.35	0.18	1.93 [†]	0.52	0.18	2.85**
<i>Adolescent gender</i>	-0.15	0.19	-0.77	-0.13	0.19	-0.71
<i>Coparenting Conflict × Antisocial Behavior</i>	-0.12	0.04	-3.41**	-0.12	0.03	-3.57**
<i>Coparenting Conflict × Adolescent Gender</i>	-0.44	0.25	-1.75 [†]	-0.25	0.24	-1.01
<i>Antisocial Behavior × Adolescent Gender</i>	0.14	0.07	2.00 [†]	0.10	0.07	1.50
<i>Coparenting Conflict × Antisocial Behavior × Adolescent Gender</i>	0.16	0.05	2.99**	0.11	0.05	2.01*
<i>Family status</i>				0.02	0.21	0.08
<i>Coparenting Conflict × Family Status</i>				-0.54	0.27	-1.98*

Note: Terms that are components of higher order interactions, and thus whose coefficients should not be interpreted without reference to higher order interactions, are in italics. The main effect of family status and the Coparenting Conflict × Family Status interaction was not significant for mothers' negativity and was therefore not included in the final model. All tests were two tailed.

[†] $p < .10$.

* $p < .05$.

** $p < .01$.

Table 4
Final Model With Coparenting Conflict, Wave 1 Adolescent Antisocial Behavior, and Adolescent Gender Predicting Adolescent Antisocial Behavior and Depressive Symptoms at Wave 2

Predictor	B	SE	t
Dependent variable: adolescent antisocial behavior at Wave 2			
Intercept	0.65	0.13	5.01**
Mothers' negativity at Wave 1	0.37	0.16	2.27*
Fathers' negativity at Wave 1	0.12	0.16	0.77
<i>Adolescent antisocial behavior at Wave 1</i>	0.54	0.06	1.27
<i>Coparenting conflict</i>	0.22	0.18	1.27
Coparenting conflict × Antisocial behavior at Wave 1	−0.08	0.04	−2.25*
Dependent variable: adolescent depressive symptoms at Wave 2			
Intercept	0.90	0.17	5.19**
Mothers' negativity at Wave 1	0.17	0.16	1.07
Fathers' negativity at Wave 1	0.14	0.16	0.89
Adolescent depressive symptoms at Wave 1	0.51	0.05	10.98**
Coparenting conflict	−0.003	0.16	−0.02
Adolescent gender	−0.68	0.24	−2.79**

Note: Terms that are components of higher order interactions, and thus whose coefficients should not be interpreted without reference to higher order interactions, are in italics. All tests were two tailed.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 5
Summary of Main Findings

Hypothesis	Outcome at Wave 2			
	Mothers' Negativity	Fathers' Negativity	Adolescent Antisocial Behavior	Adolescent Depression
Coparenting conflict predicts unique variance above marital disagreement and quality	Yes	Yes	Yes	Yes
Coparenting conflict interacts with adolescent and family characteristics in predicting outcomes longitudinally:				
W1 adolescent antisocial behavior	Yes ^a	Yes ^a	Yes	No
Adolescent gender	Yes ^a	No	No	No
Adolescent birth order	No	No	No	No
Family status	No	Yes	No	No
W1 Adolescent Antisocial Behavior × Adolescent Gender	Yes	Yes	No	No

^aThese interactions were qualified by higher order interactions. W1 = Wave 1.