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The Correlates of Conflict: Disagreement Is Not Necessarily Detrimental

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Abstract

In this study, the authors examined whether concurrent associations between adolescent outcomes and disagreements with mothers, fathers, and best friends vary as a function of perceived relationship quality. Participants were 469 11- to 18-year-old youths from a culturally diverse community. Negative qualities of parent–adolescent and friend relationships were linked to adjustment problems (aggression, anxiety and depression, delinquency, and withdrawal). Positive qualities of parent–adolescent relationships were linked to school grades and adjustment problems. Nonlinear associations between conflict and adolescent outcomes were moderated by negative qualities of relationships such that increases in conflict from low to moderate levels were linked to (a) higher school grades for adolescents in better but not poorer quality relationships and (b) greater delinquency and withdrawal for adolescents in poorer but not better quality relationships.

Keywords

adolescent conflict; mother-adolescent relationship; father-adolescent relationship; friendship

Interpersonal conflict can be aversive. For this reason, contention is assumed to be antithetical to individual wellbeing. But is conflict necessarily pernicious? Many scholars believe that the valence of conflict depends on the family in which it arises: Conflict in supportive relationships is thought to be constructive and beneficial, whereas conflict in unsupportive relationships is considered destructive and detrimental. Agreement about this intuitively appealing assumption obscures the fact that it has received scant empirical attention. The present investigation was designed to address this proposition by exploring whether associations between indices of adolescent well-being and self-reports of disagreements with mothers, fathers, and best friends vary as a function of the perceived quality of the relationship in which the disagreement arises.

Conflict is an essential form of communication. Over the course of a typical day, adolescents report three or four conflicts with parents and one or two conflicts with friends (Laursen & Collins, 1994). Conflicts signal the significance of topics and relationships, they provide a means for expressing concern and dissatisfaction, and they serve as a vehicle for individual growth and relationship transformation (Sillars, Canary, & Tafoya, 2004). Conflict, defined as overt behavioral opposition, is typically operationalized in terms of disagreement or incompatible behaviors. This designation has the advantage of disentangling conflict from competition and aggression and avoiding problems that arise when conflict is conflated with negative affect. Our goal was to describe the role conflict plays in shaping adolescent outcomes.

We defined conflict as disagreement so as to capture all instances of opposition; we focused on conflict with parents and friends because most adolescents report these relationships to be their closest, most influential, and most conflict prone; we assessed the frequency of conflicts from the previous weekday so as to maximize chances that all disagreements were remembered and reported; and we limited reports to school days because of our interest in factors that shape academic accomplishments.

Most studies of conflict focus on its destructive potential. Considerable evidence supports the notion that a high level of discord is a marker of adolescent adjustment difficulties. In the classic Isle of Wight study, for instance, adolescents with psychiatric disorders were twice as likely to report altercations with parents as were those without psychiatric disorders (Rutter, Graham, Chadwick, & Yule, 1976). Community samples of adolescents also report associations between indices of maladjustment and the frequency of conflict, primarily with parents (for a review, see Smetana, 1996). Elevated rates of conflict have been linked to adverse adolescent outcomes in at least five areas: (a) aggression, (b) depression, (c) delinquency and deviancy, (d) school grades, and (e) withdrawal and peer difficulties. Thus, conflict has been tied to behavior problems and academic achievement among referred and nonreferred adolescents alike.

Less attention has been given to the constructive potential of conflict. Piaget (1932) was one of the first to describe the potential benefits of conflict, arguing that developmental change has origins in the cognitive disequilibria that stem from disagreement. More recent scholars have suggested that conflict may promote well-being insofar as it provides opportunities for improving self-expression and refining interpersonal collaboration skills (Dunn, 2004). Although most evidence for this proposition comes from research with young children, a study of early adolescents revealed that the relative frequency of calm disagreements with parents was inversely associated with low levels of internalizing and externalizing problems and high levels of academic achievement (Tesser, Forehand, Brody, & Long, 1989). In sum, there is support for the notion that conflict has benefits too.

How can reports indicating that conflict is beneficial be reconciled with reports indicating that conflict is detrimental? This apparent contradiction arises out of research predicated on assumptions of a linear association between conflict and individual well-being. Family systems theory addresses this paradox with an alternative perspective that assumes curvilinear patterns (Olson et al., 1983; Reiss, 1981). In this view, some disagreement is required to address problems and facilitate change, but there is a point where most benefits have been realized and additional conflict is counterproductive. Eventually, the adverse consequences of chronic discord overtake the gains that accrue from moderate disagreement (Katz, Kramer, & Gottman, 1992). It follows that adolescents who report some conflict should fare as well or better than adolescents who report no conflict because experience managing disagreement may promote competencies that buffer against maladjustment. However, adolescents who report high levels of conflict should fare worse than those who report some or no conflict because unrelenting contentiousness undermines self-worth and overwhelms coping mechanisms.

To understand the role conflict plays in individual outcomes, it is also necessary to consider the relationship in which the disagreement takes place, because well-being is closely tied to the quality of family and friend relationships. In the present study, we focus on self-reports of relationship quality in light of evidence indicating that self-perceptions of relationships are better predictors of outcomes than are objective assessments (Shrauger & Schoeneman, 1979). Two avenues of relationship influence have been identified: direct influences, whereby relationship quality uniquely shapes individual outcomes, and moderated influences, whereby supportive relationships buffer against deleterious outcomes and unsupportive relationships exacerbate adaptive difficulties. Direct influences have received the most attention. Adolescent

reports of positive and negative relationship qualities have been linked to behavior problems and academic achievement (Loeber, Farrington, Stouthamer-Loeber, & van Kammen, 1998). Moderated effects have been proposed such that relationship quality moderates associations between conflict and adolescent outcomes (Cooper, 1988). Studies of married couples provide qualified support for this hypothesis (Bradbury & Fincham, 1990; Gottman, 1994). When positive and negative views of marital relationships are considered separately, perceptions of the latter emerge as stronger arbiters of links from conflict behavior to marriage stability and life satisfaction. Reports of parent–child and friend relationships indicated that perceptions of positive qualities do not consistently moderate associations between conflict and adolescent behavior problems, except among youth with alcoholic fathers (Barrera & Stice, 1998). These findings suggest that negative relationship qualities are more likely than positive relationship qualities to moderate associations between conflict and adolescent adjustment.

The present study was designed to address two questions: (a) Are conflict frequencies and perceptions of relationship quality associated with adolescent outcomes? and (b) Do perceptions of relationship quality moderate associations between conflict frequencies and adolescent outcomes? Positive associations were expected between negative relationship qualities and maladaptive outcomes (i.e., aggression, anxiety and depression, delinquency, and withdrawal); similar associations were anticipated between positive relationship qualities and adaptive outcomes (i.e., good school grades). Curvilinear associations between conflict and adolescent outcomes were hypothesized: Increases in conflict from low to moderate levels should be associated with higher school grades and fewer adjustment problems, but increases in conflict from moderate to high levels should be associated with lower school grades and more adjustment problems. These patterns were expected to vary, however, as a function of perceived relationship quality. The benefits of moderate conflict should be limited to adolescents in high-quality relationships, and the liabilities of excessive conflict should be especially pronounced for adolescents in low-quality relationships. Negative relationship qualities were expected to play a greater role than positive relationship qualities in moderating associations between conflict and adolescent outcomes.

Method

Participants

A total of 469 adolescents were recruited from public schools in the greater Miami and Fort Lauderdale, Florida, metropolitan area. Of this total, 32.8% ($n = 154$) were early adolescents in the 6th grade (11 to 12 years old, $M = 11.59$ years), 33.9% ($n = 159$) were mid-adolescents in the 9th grade (14 to 15 years old, $M = 14.70$ years), and 33.3% ($n = 156$) were late adolescents in the 12th grade (17 to 18 years old, $M = 17.52$ years). Participants were selected on the basis of responses to a parent demographic survey attached to the consent form. Participation was restricted to the three largest ethnic groups in the community: (a) non-Hispanic Anglo Americans, (b) non-Hispanic and non-Caribbean African Americans, and (c) Hispanic Americans of Cuban ancestry. English was the primary language spoken in African American and Anglo American homes, whereas Spanish was the primary language spoken in Cuban American homes. The final sample was 33.9% African American (79 girls and 80 boys), 33.5% Anglo American (82 girls and 75 boys), and 32.6% Cuban American (77 girls and 76 boys). Each sex and ethnic group contained 23 to 28 adolescents in the 6th, 9th, and 12th grades. Parent reports indicated that 49.0% ($n = 230$) of participants resided in households with two biological parents, 19.0% ($n = 89$) resided with one biological parent and one stepparent, and 32.0% ($n = 150$) resided with one biological parent only. Socioeconomic status (SES) was assessed with the Hollingshead (1975) four-factor index in which the potential range of scores is 8 to 66. In the present study, SES ranged from 20 to 66 ($M = 38.87$, $SD = 8.4$).

Instruments

Conflict frequency—The Interpersonal Conflict Questionnaire (Laursen, 1993) assayed daily disagreements. From a list of 34 conflict topics (adapted from Prinz, Foster, Kent, & O’Leary, 1979), participants were asked to identify the number of disagreements over each topic that arose during the previous weekday with mothers, fathers, and best friends. Conflict was defined as disagreement: “You and someone else had a difference of opinion; you objected to something someone else said or did or someone objected to something you said or did; or you and someone had a quarrel or an argument.” *Conflict frequency* describes the number of disagreements reported with mothers ($M = 2.51$, $SD = 3.2$, range = 0–22), fathers ($M = 1.04$, $SD = 2.1$, range = 0–20), and friends ($M = 0.95$, $SD = 1.7$, range = 0–18). Collecting reports from the previous day is an important means of reducing response biases. Participants in self-report surveys tend to infer meaning from the reference period: Short time periods imply frequent, mundane experiences and long periods imply rare, affectively laden events (Winkelman, Knäuper, & Schwarz, 1998). Longer time frames for recall also increase biases linked to relationship representations (Feeney & Cassidy, 2003). In the present study, a brief reference period was selected to increase the likelihood that all daily disagreements would be reported and to avoid problems that arise when frequency is confounded with affective intensity (Laursen, Coy, & Collins, 1998). Previous reports from a sample of mid- to late adolescents revealed moderate stability ($r = .59$) in daily conflict frequencies across a 2-week period (Laursen & Koplas, 1995). Measures of daily conflict derived from this instrument have been linked to adolescent self-esteem, school grades, and behavior problems (Burk & Laursen, 2005; Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997; Shulman & Laursen, 2002). Differences between two-parent and single-parent households and between parent–child and friend relationships have been identified in terms of the frequency and management of daily conflict (Adams & Laursen, 2001; Laursen, 1995, 2006).

Relationship qualities—The Network of Relationships Inventory (Furman & Buhrmester, 1985) measured perceptions of relationships with mothers, fathers, and best friends. Adolescents completed a 33-item instrument describing 11 relationship provisions; each item included a separate evaluation of each relationship. Subscales consisted of three items, rated on a scale ranging from 1 (*little or none*) to 5 (*the most*). Previous studies indicate that these subscales load on two primary factors (Burk & Laursen, 2005; Furman, 1996). *Positivity* includes eight subscales: Admiration, Affection, Companionship, Instrumental Aid, Intimacy, Nurturance, Reliable Alliance, and Satisfaction. Internal reliabilities derived from subscale scores were high across relationships ($\alpha = .94-.96$). *Negativity* includes two subscales: Conflict and Punishment. Internal reliabilities derived from subscale scores were acceptable across relationships ($\alpha = .77-.80$). For each relationship, item scores were averaged for each variable. Mother–adolescent positivity ranged from 1.2 to 5.0 ($M = 4.00$, $SD = 0.7$), father–adolescent positivity ranged from 1.0 to 5.0 ($M = 3.50$, $SD = 0.9$), and friend positivity ranged from 1.4 to 5.0 ($M = 3.73$, $SD = 0.8$). Mother–adolescent negativity ranged from 1.0 to 5.0 ($M = 2.71$, $SD = 0.9$), father–adolescent negativity ranged from 1.0 to 5.0 ($M = 2.43$, $SD = 0.9$), and friend negativity ranged from 1.0 to 4.5 ($M = 1.84$, $SD = 0.7$).

There was minimal overlap between negativity and conflict frequency. Negativity items reflect global perceptions of relationship quality characterized by high levels of negative affect (i.e., get upset, quarrel, argue, punish, discipline, and scold). In contrast, conflict frequency measures the number of daily disagreements, regardless of affective valence. Previous studies indicate that adolescent reports of conflict with mothers and fathers do not predict subsequent reports of negativity in these relationships (Smetana, Metzger, & Campione-Barr, 2004). In the present study, concurrent associations between these variables were modest (see Table 1). Correlations between conflict frequency and the two subscales composing relationship negativity were virtually identical, and r -to- z transformations revealed no statistically significant differences

in the magnitude of these correlations. Nevertheless, additional regression analyses were conducted in which each negativity subscale score was separately substituted for the composite score. The same statistically significant results emerged in 29 of 30 analyses, a pattern that does not differ from what is expected by chance.

Adjustment problems—The Youth Self-Report (Achenbach, 1991) provided an assessment of adjustment problems. Adolescents completed the 103-item questionnaire describing eight narrowband syndromes. Each item was rated on a 3-point scale ranging from 0 (*never*) to 2 (*often*). For each subscale, item scores were summed. The present study focused on the four subscales with demonstrated links to relationship quality and conflict.

Aggression ($\alpha = .89$) includes 19 items that assess hostile and violent behavior ($M = 8.41$, $SD = 5.8$, range = 0–30). *Anxiety/Depression* ($\alpha = .86$) includes 16 items that assess insecurity and depressed mood ($M = 5.94$, $SD = 5.2$, range = 0–27). *Delinquency* ($\alpha = .73$) consists of 11 items that measure antisocial behavior ($M = 3.88$, $SD = 3.07$, range = 0–17). *Withdrawal* ($\alpha = .63$) consists of 7 items that measure social isolation ($M = 3.72$, $SD = 3.7$, range = 0–13).

School grades—School officials provided the cumulative grade point average for each participant. *School grades* represent the mean of all grades received during the school year in which the data were collected. The potential range of school grades is from 0.0 (*F*) to 4.0 (*A*). In the present study, school grades ranged from 0.3 to 4.0 ($M = 2.62$, $SD = 0.8$).

Procedure

Participants were recruited from classes selected by school personnel to include students who were representative of the entire school population (e.g., required classes rather than special placement or elective classes). Parents consented to their child's participation and returned a demographic survey attached to the letter of invitation (both were written in Spanish and English). Participation rates mirrored those of previous studies (e.g., Silk, Steinberg, & Morris, 2003), ranging from approximately 45% to 75% across the schools, with the lowest rates among late adolescent African American boys. Participants completed questionnaires in small groups during 1-hr sessions in school. Research assistants read the instructions aloud and supervised the completion of the surveys. Participants with more than one mother or father (i.e., a biological parent and a stepparent) were instructed to describe their closest relationship. Participants who did not have contact with a mother or father were instructed to skip items concerning that relationship.

Plan of Analysis

Regression analyses included one of five outcome variables: aggression, anxiety and depression, delinquency, school grades, and withdrawal. Separate analyses were conducted for relationships with mothers, fathers, and best friends. Some participants did not have all three relationships, so the sample size differed across analyses (mother–adolescent $n = 450$, father–adolescent $n = 412$, friend $n = 451$). Collinearity indices were well within acceptable limits (variance inflation factors < 10.0) for all analyses. Predictor variables were centered by subtracting each score from the mean score of the variable. Preliminary analyses revealed statistically significant ($p < .05$) correlations between adolescent outcomes and ethnicity, sex, and SES, so these variables were included in the first step of each regression. Preliminary regression analyses were also conducted and revealed that age group and household structure were unrelated to adjustment problems and school grades and that their presence in the regressions did not change the findings for any of the other effects in the regressions. Therefore, age group and household structure were dropped from the final analyses.

The second step of each regression involved exploring associations that linked conflict frequencies and relationship quality to adolescent outcomes. The predictor variables in this

step included conflict frequency (linear effect), the square of conflict frequency (nonlinear effect), relationship negativity, and relationship positivity.

With the third step of each regression, we explored whether perceptions of relationship quality moderated links between conflict frequency and adolescent outcomes. Separate regressions were performed with relationship positivity and relationship negativity as moderators. For relationship negativity, the predictor variables in this step included the two-way interaction between the linear effect of conflict frequency and negativity and the two-way interaction between the nonlinear effect of conflict frequency and negativity. For relationship positivity, the predictor variables in this step included the two-way interaction between the linear effect of conflict frequency and positivity and the two-way interaction between the nonlinear effect of conflict frequency and positivity.

Statistically significant interactions were interpreted with the post hoc procedures advocated by Aiken and West (1991). For interactions involving linear conflict frequency effects, the association between the predictor variable and the outcome variable was estimated by the test of the slope at three levels of the moderator variable: high (one standard deviation above the mean), average (the mean), and low (one standard deviation below the mean). For example, to test the interaction between the linear effect of father–adolescent conflict frequency and the effect of relationship negativity on adolescent withdrawal, we calculated associations between father–adolescent conflict frequency and adolescent withdrawal for low, average, and high levels of father–adolescent negativity. For interactions involving nonlinear conflict frequency effects, the association between the predictor variable and the outcome variable was estimated by the test of the slope for three levels of the moderator variable (high, average, and low) at three levels of the predictor variable (one standard deviation below the mean, the mean, and one standard deviation above the mean).

Because the interactions tested in the analyses described above are especially susceptible to issues concerning the assumptions of multiple regression, various diagnostic tools were used to examine possible violations. First, the normality of the regression residuals for each regression equation was examined using a normal q-q plot. For all equations, the plotted points did not substantially deviate from a straight line at a 45° angle. This suggests that the residuals in each regression equation were normally distributed. Next, possible violations of the homoscedasticity of the residuals were analyzed by examining three residual plots for each regression equation. For each residual plot, the residuals were on the y-axis, and the each x-axis was either the predicted values, the linear interaction, or the curvilinear interaction. The lowest lines at the mean of the residuals, one standard deviation above the mean of the residuals, and one standard deviation below the mean of the residuals were parallel in all residual plots for each regression equation showing that the variance of the residuals did not change as a function of the predicted values, the linear interaction, or the curvilinear interaction. This suggests assumptions for the homoscedasticity of the residuals were met for these analyses. Finally, diagnostic statistics were examined to determine if outliers within the data may have affected the findings for each regression equation. No single case had a DFFITS above the cutoff of $\pm .31$ (cutoff score was based on $k = 10$ and $n = 451$), and the DFBETAS for each of the interaction effects for all of the cases were all below the cutoff of .09 (cutoff score was based on $n = 451$). This suggests that none of the cases highly influenced the reported results.

Results

Associations Between Demographic Characteristics and Adolescent Outcomes

Associations emerged between ethnicity and adolescent outcomes and between sex and adolescent outcomes. Anglo Americans had higher school grades and less withdrawal than did

African Americans. Girls had higher school grades, more withdrawal, and less delinquency than did boys. These findings are summarized in Step 1 of Tables 2, 3, and 4.

Associations Between Conflict and Adolescent Outcomes

There was a positive linear association between conflict with friends and aggression, conflict with fathers and delinquency, and conflict with mothers and withdrawal. In addition, there were linear and nonlinear associations between friend conflict and school grades. These findings are summarized in Step 2 of Tables 2, 3, and 4. Post hoc analyses of the association between friend conflict and school grades indicated that school grades declined as conflict with friends increased from low to medium levels, but there was no significant association between conflict and grades at high levels of conflict.

Associations Between Relationship Quality and Adolescent Outcomes

Positive linear associations emerged linking mother–adolescent negativity and friend negativity to aggression, anxiety and depression, delinquency, and withdrawal. Positive linear associations also linked father–adolescent negativity to aggression, anxiety and depression, and delinquency. Negative linear associations emerged that linked mother–adolescent positivity and father–adolescent positivity to aggression, anxiety and depression, delinquency, and withdrawal. Positive linear associations linked mother–adolescent positivity and father–adolescent positivity to school grades. These findings are summarized in Step 2 of Tables 2, 3, and 4.

Associations Between Conflict and Adolescent Outcomes Moderated by Relationship Quality

Relationship negativity moderated associations between conflict and adolescent outcomes in 6 out of 15 analyses. These findings are summarized in Step 3 of Tables 2, 3, and 4. Relationship positivity did not moderate associations between conflict and adolescent outcomes.

Delinquency—Figure 1 depicts the interactions between conflict frequency and friend negativity for delinquency. For those reporting low levels of negativity, the slope of the association between conflict frequency and delinquency was statistically significant at high levels of conflict ($\beta = .13, p < .05$) but not at low and medium levels of conflict. Thus, in low-negativity friendships, increases in conflict were associated with increases in delinquency only at conflict frequencies above the mean. For those reporting average levels of negativity, the slope of the association between conflict frequency and delinquency was the same at low, medium, and high levels of conflict ($\beta s = .14, p < .05$). Thus, in friendships with average levels of negativity, delinquency increased as a positive linear function of conflict. For those reporting high levels of negativity, the slope of the associations between conflict frequency and delinquency was statistically significant at low, medium, and high levels of conflict, but the magnitude of the slope diminished as conflict increased from low levels of conflict ($\beta = .33, p < .01$) to medium levels of conflict ($\beta = .24, p < .01$) to high levels of conflict ($\beta = .12, p < .05$). Thus, in highnegativity friendships, delinquency increased as a positive nonlinear function of conflict frequency, with greater increases at low levels of conflict than at high levels of conflict.

School grades—The top of Figure 2 depicts the interactions between conflict frequency and mother–adolescent negativity for school grades. For those reporting low levels of negativity, the slope of the association between conflict frequency and school grades was positive at low levels of conflict ($\beta = .26, p < .01$), not statistically significant at medium levels of conflict, and negative at high levels of conflict ($\beta = -.24, p < .01$). Similar findings emerged for those reporting average negativity (for low levels of conflict, $\beta = .20, p < .01$; for medium levels of

conflict, $\beta = -.01$, $p = ns$; and for high levels of conflict, $\beta = -.21$, $p < .01$). Thus, in mother–adolescent relationships that had low or average levels of negativity, there was a pattern such that increases in conflict were associated with increases in school grades for those with few disagreements, but increases in conflict were associated with decreases in school grades for those with many disagreements. For those reporting high levels of negativity, the slope of the association between conflict frequency and school grades was not statistically significant at low, medium, or high levels of conflict. Thus, in mother–adolescent relationships with high levels of negativity, conflict frequency was not associated with school grades.

The bottom half of Figure 2 depicts interactions between conflict frequency and father–adolescent negativity for school grades. For those reporting low levels of negativity, the slope of the association between conflict frequency and school grades was statistically significant at low ($\beta = .29$, $p < .01$) and medium ($\beta = .26$, $p < .01$) levels of conflict but not at high levels of conflict. Similar findings emerged for those reporting average negativity (for low levels of conflict, $\beta = .22$, $p < .01$; for medium levels of conflict, $\beta = .19$, $p < .05$; and for high levels of conflict, $\beta = .03$, $p = ns$). Thus, in father–adolescent relationships that were low or average in negativity, increases in conflict were associated with increases in school grades, but only until daily conflict frequencies increased to average levels. For those reporting high levels of negativity, the slope of the association between conflict frequency and school grades was not statistically significant at low, medium, or high levels of conflict. Thus, in father–adolescent relationships with high levels of negativity, conflict frequency was not associated with school grades.

Withdrawal—The top of Figure 3 depicts interactions between mother–adolescent conflict frequency and negativity for withdrawal. For those reporting low levels of negativity, the slope of the association between conflict frequency and withdrawal was statistically significant at high levels of conflict ($\beta = .19$, $p < .05$) but not at low and medium levels of conflict. Thus, in mother–adolescent relationships with low levels of negativity, increases in conflict were associated with increases in delinquency only at high daily conflict frequencies. For those reporting average levels of negativity and for those reporting high levels of negativity, the slope of the association between conflict frequency and delinquency was similar at low, medium, and high levels of conflict (low $\beta = .23$, $p < .01$; medium $\beta = .23$, $p < .01$; high $\beta = .25$, $p < .01$). Thus, in mother–adolescent relationships with average or high levels of negativity, withdrawal increased as a positive linear function of conflict.

The middle of Figure 3 depicts interactions between father–adolescent conflict frequency and negativity for withdrawal. For those reporting low levels of negativity, the slope of the association between conflict frequency and withdrawal was statistically significant at low ($\beta = -.25$, $p < .01$) and medium ($\beta = -.20$, $p < .01$) levels of conflict but not at high levels of conflict. Thus, in father–adolescent relationships with low levels of negativity, increases in conflict were associated with decreases in withdrawal, but only as daily conflict frequencies increased to average levels. For those reporting average levels of negativity, the slope of the association between conflict frequency and withdrawal was not statistically significant at low, medium, or high levels of conflict. Thus, in father–adolescent relationships with average levels of negativity, conflict frequency was not associated with withdrawal. For those reporting high levels of negativity, the slope of the association between conflict frequency and withdrawal was the same at low, medium, and high levels of conflict ($\beta = .21$, $p < .01$). Thus, in father–adolescent relationships with high levels of negativity, withdrawal increased as a positive linear function of conflict.

The bottom of Figure 3 depicts interactions between friend conflict frequency and negativity for withdrawal. For those reporting low levels of negativity, the slope of the association between conflict frequency and withdrawal was statistically significant at high levels of conflict

($\beta = .26, p < .01$) but not at low and medium levels of conflict. Thus, in friendships with low levels of negativity, increases in conflict were associated with increases in delinquency only at high levels of daily conflict frequencies. For those reporting average levels of negativity and for those reporting high levels negativity, the slope of the association between conflict frequency and delinquency were similar at low ($\beta = .30, p < .01$), medium ($\beta = .30, p < .01$), and high levels of conflict ($\beta = .34, p < .01$). Thus, in friendships with average or high levels of negativity, withdrawal increased as a positive linear function of conflict.

Additional Analyses

Additional analyses were conducted to determine the size of the unique linear and nonlinear interaction effects. In these analyses, the regressions were conducted in the same way as in the above analyses, except on the third step only the linear interaction was entered and on the fourth step the nonlinear interaction was entered. The change in R^2 for each step was examined. For mother–adolescent conflict, none of the changes in R^2 were significant for the linear interaction effects, and the nonlinear interaction was significant only for school grades ($\Delta R^2 = .03$) and withdrawal ($\Delta R^2 = .01$). For father–adolescent conflict, only the linear interaction for withdrawal ($\Delta R^2 = .01$) was significant, and the nonlinear interaction was significant only for school grades ($\Delta R^2 = .01$) and withdrawal ($\Delta R^2 = .01$). For friend conflict, none of the changes in R^2 were significant for the linear interaction effects, and the nonlinear interaction was significant only for delinquency ($\Delta R^2 = .01$) and withdrawal ($\Delta R^2 = .01$).

Supplemental Analyses of Demographic Characteristics as Potential Moderators

Separate regression analyses were conducted with age group, sex, ethnicity, household structure, and SES as predictors in Step 1 and as moderators in Steps 2 and 3. No statistically significant interactions involved any demographic characteristics.

Discussion

To bridge two seemingly contradictory empirical literatures that implicate conflict in both beneficial and detrimental outcomes, we tested a model in which associations between conflict frequency and adolescent well-being varied as a function of the perceived quality of the relationship. Greater conflict was expected to be tied to worse outcomes for adolescents with negative views of relationships; for those who do not share these perceptions, conflict was expected to proffer advantaged outcomes to those who partook in it in moderation but deleterious outcomes to those involved in frequent discord.

The results offer the strongest support to date for the claim that the consequences of conflict depend on the quality of the relationship. Conflict frequencies were linked to delinquency, school grades, and withdrawal, but associations differed according to perceived relationship negativity. For adolescents reporting low levels of negativity, increases in conflict to medium levels were never associated with worse outcomes and were sometimes associated with better outcomes, but for adolescents reporting high levels of negativity, increases in conflict to medium levels were never associated with better outcomes and were sometimes associated with worse outcomes. Thus, increases in conflict from low to medium levels were linked to (a) higher school grades for adolescents in better but not poorer quality relationships and (b) greater delinquency and withdrawal for adolescents in poorer but not better quality relationships. As expected, high levels of conflict were never beneficial, and there was some suggestion that better quality relationships were more adversely impacted than were poorer quality relationships. Nonlinear trends were evident in most lownegativity relationships: As conflict increased from medium to high levels, delinquency increased, school grades either worsened or stopped improving, and withdrawal either increased or stopped declining.

The findings support claims that negativity exacerbates the difficulties that accompany chronic conflict and inhibits the beneficial consequences of modest conflict by creating conditions of mistrust and apprehension that are antithetical to supportive relationships (Olson et al., 1983; Reiss, 1981). Under these circumstances, disengagement from parents and the accompanying renegotiation of adolescent roles and responsibilities may prove difficult, prompting a downward spiral of maladaptation and contentiousness. We did not anticipate the finding that high levels of conflict would be relatively more detrimental to better quality relationships than to poorer quality relationships, but it is not difficult to imagine that problems arise when expectations of interpersonal harmony are violated by frequent discord. Absent excessive negativity, conflict offers an important mechanism through which individuals in a relationship balance competing needs, facilitating individual growth and development by providing adolescents with an opportunity to advance new positions and refine new skills (Cooper, 1988). Indeed, conflict is an important vehicle through which parents and adolescents renegotiate roles and responsibilities (Smetana, 1988). Yet the present study suggests that there are individual differences in this process that are not yet well understood.

Central to our model is the supposition that previous unidimensional assessments of relationship quality masked differences in the moderating influence of positive and negative features of relationships. It is noteworthy that relationship negativity affected the associations between conflict and adolescent outcomes, but relationship positivity did not. These results are consistent with prospective studies of married couples indicating that negative attributions are more likely than positive attributions to serve as intermediaries between conflict behavior and marital dissatisfaction (Bradbury & Fincham, 1990) and that negative behaviors are a better moderator than positive behaviors of associations between conflict and marital problems (Gottman, 1994). Taken together, the evidence suggests that previous efforts to identify moderated links between adolescent outcomes and conflict with parents and friends (e.g., Barrera & Stice, 1998) may have been less than successful because the index of relationship quality focused exclusively on positive perceptions. Favorable views toward one's partner may be advantageous in their own right, but they do not appear to be sufficient in ameliorating conflict sequelae.

In addition to these moderated effects, relationship quality was directly tied to adolescent outcomes. In the present study, we extend previous findings by considering positive and negative qualities of close relationships. Adolescent adjustment problems were linked to positive and negative perceptions of parent-adolescent relationships; school grades were linked to positive perceptions only. Adjustment problems were also linked to negative qualities of best friend relationships but, in contrast with parent-adolescent relationships, positive qualities of friendship were unrelated to adjustment problems and school grades. Hartup (1996) suggested that positive friendship features may not be a good barometer of individual outcomes because attributes such as companionship and intimacy tend to characterize the friendships of well-adjusted and poorly adjusted children alike. Explication of these null associations must await replication and an elaboration of specific influence mechanisms.

Although the findings were generally consistent with our model, this study is not the final word on the topic. We failed to identify moderated links between conflict frequency and either aggression or anxiety and depression. These null findings should be interpreted with caution. Although regression analyses are an appropriate technique for examining interactions involving continuous variables, they tend to underestimate actual effects (McClelland & Judd, 1993). Other issues should be considered when interpreting the findings. Separate analyses were conducted for each relationship because not all adolescents participated in all relationships. As a result, the effects include variance shared by mother, fathers, and friends. Future research will have to determine the unique influence of each relationship. Finally, shared method variance may have inflated the magnitude of effects based on self-report

questionnaires. Confidence in these conclusions should be bolstered by the fact that (a) similar findings emerged for objective (e.g., school grades) and subjective (e.g., adjustment problems) indices and (b) shared variance due to negative response biases was removed from regression estimates of nonlinear associations by prior estimates of linear associations. Nevertheless, replication with objective adjustment indices is essential.

Acknowledging these limitations does not change the conclusion that the benefits of conflict appear to be accompanied by costs. We suspect that daily disagreements contribute to relationship perceptions and that both anticipate adolescent well-being, but our data only describe group differences in concurrent associations. Other characteristics of conflict, such as negative affect and resolution style, may also predict adolescent outcomes. Links between perceptions of relationship negativity and the tenor of daily disagreements should be especially strong among youth with the lowest quality relationships. Only longitudinal data can determine whether individual well-being is a consequence or a correlate of the characteristics of conflict and the perceived quality of the relationship.

We have previously argued that interpersonal conflict is akin to a play or a novel (Laursen & Collins, 1994), but the present findings suggest that an opera may be a more appropriate analogy. Many people find conflict and opera equally distasteful. Nevertheless, some exposure to music appears to have salutatory effects, and findings from the present study suggest something similar for conflict. Moderate conflict is associated with favorable outcomes, but only for adolescents in relationships with low levels of perceived negativity. Adverse outcomes associated with overexposure to opera have yet to be documented, but excessive conflict is linked to social and academic difficulties, even for those in the best relationships. Disagreement is not necessarily detrimental, but neither is it intrinsically beneficial; the consequences depend on how often it occurs and with whom it is experienced.

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Figure 1.

Regression slopes for concurrent associations between conflict frequency and adolescent delinquency at low, average, and high levels of negativity in friend relationships.

Figure 2. Regression slopes for concurrent associations between conflict frequency and adolescent school grades at low, average, and high levels of negativity in mother-adolescent and father-adolescent relationships.

Figure 3.

Regression slopes for concurrent associations between conflict frequency and adolescent withdrawal at low, average, and high levels of negativity in mother-adolescent, father-adolescent, and friend relationships.

Table 1
Intercorrelations, Means, and Standard Deviations for Conflict Frequency, Relationship Quality, and Adolescent Adjustment Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	M	SD
Conflict frequency																
1. Father-adolescent	—														1.04	2.1
2. Friend	.48**	—													0.95	1.7
3. Mother-adolescent	.31**	.32**	—												2.51	3.2
Relationship quality																
4. Father-adolescent	.26**	.12*	.04	—											2.43	0.9
5. Father-adolescent negativity	.05	-.07	.15*	.22**	—										3.50	0.9
6. Friend negativity	.12*	.12*	.00	.47**	.09	—									1.84	0.7
7. Friend positivity	.08	.08	.02	.00	.13*	.00	—								3.73	0.8
8. Mother-adolescent negativity	.14*	.14*	.20**	.54**	.01	.44**	.00	—							2.71	0.9
9. Mother-adolescent positivity	-.07	-.05	.00	.06	.45**	.06	.30**	-.03	—						4.00	0.7
Adolescent adjustment																
10. Aggression	.10	.16**	.08	.24**	-.11	.24**	.03	.28**	.18**	—					53.64	5.8
11. Anxiety or depression	.07	.10	.04	.17**	.17**	.20**	-.04	.21**	.20**	.60**	—				61.21	5.2
12. Delinquency	.09	.10	.03	.14*	.18**	.23**	.01	.23**	.27**	.63**	.44*	—			58.43	3.1
13. School grades	.02	-.04	.13*	-.06	.19**	.19**	.02	.15*	.07	.15*	-.06	.27**	—		2.62	0.8
14. Withdrawal	.04	.11	.16**	.05	.24**	.14*	-.06	.18**	.19**	.41**	.68**	.38**	.13*	—	53.35	2.6

Note. *ns* = 423 to 469. Relationship quality scores range from 1 (*little or none*) to 5 (*the most*). Adolescent adjustment scores are given as percentiles, ranging from 50 to 99; raw scores were used in all analyses. School grades range from 0.0 (*F*) to 4.0 (*A*).

* $p < .05$.

** $p < .01$.

Table 2
Summary of Regression Analyses Linking Adolescent Outcomes to Mother-Adolescent Conflict and Relationship Quality

Step and predictor variable	Aggression			Anxiety and depression			Delinquency			School grades			Withdrawal		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Step 1: Associations between demographic characteristics and adolescent outcomes															
Ethnicity A	.41	.33	.07	.14	.30	.03	.24	.17	.07	.31	.04	.35**	-.45	.14	-.17*
Ethnicity B	.17	.33	.03	.22	.30	.04	.22	.17	.07	.06	.04	.09	-.30	.14	-.11
Sex	-.24	.27	-.04	-.49	.24	-.09	.39	.14	.14*	-.12	.04	-.15*	.36	.12	-.14*
Socioeconomic status	-.03	.03	-.05	-.03	.03	-.05	.301	.02	.302	.01	.01	.07	-.02	.01	-.08
R^2	.01			.01				.02			.15			.05	
$F(4, 445)$	0.74			1.46				2.59*			19.54**			6.14**	
Step 2: Associations between mother-adolescent conflict and adolescent outcomes and between mother-adolescent relationship quality and adolescent outcomes															
Linear conflict	.07	.11	.04	.01	.10	.01	.04	.06	.05	-.01	.02	-.03	.12	.05	.15*
Nonlinear conflict	-.01	.01	-.01	.01	.01	-.02	-.01	.01	-.04	-.00	.00	-.11	-.01	.01	-.07
Negativity	.29	.05	.27**	.20	.04	.20**	.13	.03	.23**	-.01	.01	-.09	.07	.02	.14*
Positivity	-.05	.02	-.15*	3.06	.01	-.18**	-.01	.01	-.28**	.01	.00	.12*	-.03	.01	-.20*
ΔR^2	.11			.08			.01	.13			.04			.08	
$F(4, 441)$	13.64**			9.99**				16.94**			5.81**				
Step 3: Associations between mother-adolescent conflict and adolescent outcomes moderated by mother-adolescent negativity															
Linear by negativity	.00	.02	.01	.01	.02	.05	.02	.01	.11	-.00	.00	-.05	.01	.01	.10
Nonlinear by negativity	-.01	.01	-.09	-.01	.01	-.05	-.01	.01	-.12	.01	.00	.31**	-.02	.01	-.19*
ΔR^2	.00			.00				.00			.03			.01	
$F(2, 439)$	0.48			0.09				1.11			7.63**			2.94**	
Total R^2	.12			.09				.15			.21			.14	
$F(10, 439)$ for total R^2	5.87**			4.62**				8.18**			12.30**			7.23**	

Note. $n = 450$. Ethnicity A: Anglo Americans = 1, Cuban Americans and African Americans = -1. Ethnicity B: Cuban Americans = 1, Anglo Americans and African Americans = -1. Sex: Boys = 1, Girls = -1.

* $p < .05$.

** $p < .01$.

Table 3
Summary of Regression Analyses Linking Adolescent Outcomes to Father-Adolescent Conflict and Relationship Quality

Step and predictor variable	Aggression			Anxiety and depression			Delinquency			School grades			Withdrawal		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Step 1: Associations between demographic characteristics and adolescent outcomes															
Ethnicity A	.54	.34	.09	.22	.31	.04	.36	.17	.11	.31	.05	.36*	.43	.15	.16*
Ethnicity B	.07	.34	.01	.07	.31	.01	.33	.17	.11	.08	.05	.09	.31	.15	-.11
Sex	.14	.27	-.02	.51	.25	-.10	.36	.14	.13*	.12	.04	.14*	.34	.12	.12
Socioeconomic status	.03	.03	-.05	.04	.03	-.06	.01	.02	-.02	.01	.00	.07	.02	.01	-.07
R^2		.01			.01			.03			.14			.05	
$F(4, 407)$		0.92			1.52			3.08*			17.32**			5.06**	
Step 2: Associations between father-adolescent conflict and adolescent outcomes and between father-adolescent relationship quality and adolescent outcomes															
Linear conflict	.31	.20	.12	.20	.18	.13	.21	.10	.16	.01	.03	.03	.10	.09	.09
Nonlinear conflict	.02	.02	-.07	.02	.02	-.10	.01	.01	-.10	.01	.01	-.03	.01	.01	-.10
Negativity	.05	.05	.27**	.19	.05	.20**	.08	.03	.16*	.01	.01	-.08	.04	.02	.10
Positivity	.01	.01	-.17**	.05	.01	-.28**	.03	.01	-.24**	.01	.01	.20**	.02	.01	-.23**
ΔR^2		.10			.08			.09			.04			.05	
$F(4, 403)$		11.18**			8.12**			10.78**			4.60**			5.95**	
Step 3: Associations between father-adolescent conflict and adolescent outcomes moderated by father-adolescent negativity															
Linear by negativity	.03	.04	.05	.01	.03	-.02	.00	.02	.04	.01	.01	.13	.02	.01	.20*
Nonlinear by negativity	.00	.00	.02	.00	.00	.04	.00	.00	.01	.02	.01	.33**	.02	.01	-.21*
ΔR^2		.00			.00			.00			.01			.01	
$F(4, 401)$		1.37			0.03			1.02			3.13*			3.49**	
Total R^2		.11			.09			.12			.19			.11	
$F(4, 401)$ for total R^2		4.93**			3.88**			5.71**			10.23**			5.73**	

Note. $n = 412$. Ethnicity A: Anglo Americans = 1, Cuban Americans and African Americans = -1. Ethnicity B: Cuban Americans = 1, Anglo Americans and African Americans = -1. Sex: Boys = 1, Girls = -1.

* $p < .05$.

** $p < .01$.

Table 4
Summary of Regression Analyses Linking Adolescent Outcomes to Friend Conflict and Relationship Quality

Step and predictor variable	Aggression			Anxiety and depression			Delinquency			School grades			Withdrawal		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Step 1: Associations between demographic characteristics and adolescent outcomes															
Ethnicity A	.45	.33	.07	.18	.30	.03	.28	.17	.09	.29	.04	.34**	-.45	.14	.17*
Ethnicity B	.17	.33	.03	.22	.30	.04	.23	.17	.07	.05	.04	.06	-.29	.14	.11
Sex	-.27	.27	-.05	-.53	.24	-.10	.36	.14	.13*	.11	.04	.13*	-.35	.12	.14*
Socioeconomic status	-.03	.03	-.05	-.03	.03	-.05	.01	.02	-.02	.01	.00	.08	-.02	.01	.06
R^2	.01			.01			.01				.13				
$F(4, 446)$	0.88			1.68			2.47*				17.74**		5.68**		
Step 2: Associations between friend conflict and adolescent outcomes and between friend relationship quality and adolescent outcomes															
Linear conflict	.62	.23	.18*	.09	.21	.03	.20	.16	.13	.10	.03	.21*	.15	.10	.10
Nonlinear conflict	.03	.03	-.09	.01	.02	.04	.01	.10	-.06	.01	.00	.21*	-.00	.01	.02
Negativity	.34	.06	.25**	.27	.06	.22**	.16	.03	.22**	.02	.00	-.10	.08	.03	.13*
Positivity	.00	.01	.00	-.02	.01	-.08	.01	.01	-.01	.00	.01	.02	-.01	.01	.10
ΔR^2	.09			.06			.01				.03				
$F(4, 442)$	10.96**			7.15**			7.56**				4.40**		4.06**		
Step 3: Associations between friend conflict and adolescent outcomes moderated by friend negativity															
Linear by negativity	.03	.06	-.04	.04	.06	.07	.04	.03	.13	.00	.00	.01	.03	.03	.12
Nonlinear by negativity	.01	.01	-.07	.01	-.01	-.12	.01	.00	.22*	.00	.01	.08	-.01	.01	.19*
ΔR^2	.00			.00			.01				.00				
$F(4, 440)$	1.13			0.93			2.97*				1.79		2.73*		
Total R^2	.10			.07			.09				.17		.09		
$F(4, 440)$ for total R^2	5.33**			-.73			4.63**				9.45**		4.38**		

Note. $n = 451$. Ethnicity A: Anglo Americans = 1, Cuban Americans and African Americans = -1. Ethnicity B: Cuban Americans = 1, Anglo Americans and African Americans = -1. Sex: Boys = 1, Girls = -1.

* $p < .05$.

** $p < .01$.