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Mother-Adolescent Conflict: Stability, Change, and Relations with Externalizing and Internalizing Behavior Problems

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Abstract

Stability and change in mother-adolescent conflict reactions (CRs) and the prediction of CRs from adolescents' earlier behavior problems (and vice versa) were examined with 131 mothers and their adolescents (63 boys). Dyads engaged in a 6-minute conflict discussion twice, 2 years apart (*M* age was 13 at Time 1 (T1). Nonverbal expressive and verbal CRs during the conflict discussion were coded. Mothers, fathers, and teachers reported on adolescents' problem behaviors. There was inter-individual (rank-order) stability for adolescents' CRs whereas mothers' reactions were less stable. Mean levels of mothers' negativity, anger, and positive reactions and adolescents' negativity declined with time. Mothers' CRs predicted and were predicted by adolescents' problem behaviors more often than adolescents' CRs in zero-order correlations. In structural models with the stability of the constructs accounted for, adolescents' externalizing problems at T1 predicted higher maternal anger at T2. Mothers' anger and positive CRs at T1 predicted fewer T2 adolescents' internalizing problems. Stability and change in CRs are discussed.

Keywords

mother-adolescent conflict; externalizing problems; internalizing problems

It has been argued that some parent-child conflict during adolescence is normative and useful for adolescents' development, enabling change towards more egalitarian parent-child

relationships (Smetana, Campione-Barr, & Metzger, 2006). Thus, a focus on the quality of mother-adolescent conflictual episodes rather than only frequency, particularly over time, could contribute to our understanding of individual differences in mother-adolescent relationships and their consequences (Scaramella & Conger, 2004). However, there is limited research examining mother-adolescent conflict longitudinally (see Capaldi, Forgatch, & Crosby, 1994; Conger & Ge, 1999; Trentacosta et al., 2011, for exceptions). Furthermore, relatively little is known about factors that contribute to the quality of mother-adolescent conflict interaction, as well as the potential effects that these interactions might have on adolescents' functioning across time.

In the present paper, mothers' and their adolescents' conflict reactions (CRs; defined here as the emotional and verbal reactions during a potentially conflictual discussion) were assessed twice, two years apart. The purpose of this research was (1) to examine the mean level and inter-individual (rank-order) stability of mothers' and adolescents' CRs over time; and (2) to predict adolescents' problem behaviors from mothers' and adolescents' earlier CRs and vice versa.

Inter-Individual Stability and Mean Level Change of Conflict Reactions over Time

Recent perspectives such as the social relationships or the accentuation perspective characterize conflicts and adolescent development as relatively continuous and stable, with change being gradual (Laursen & Collins, 1994; Scaramella & Conger, 2004). Whether emphasizing continuity due to the quality of earlier relationships or due to the stability of personality and related behaviors, both perspectives would predict differential continuity for parent-child interactions/relationships (i.e., that relative rank-order differences among individuals remain invariant over time).

Based on these perspectives and the possible role of stable dispositional differences in CRs (e.g., Eisenberg et al., 2008), rank-order stability across time in CRs would be predicted. Indeed, investigators have found stability in frequency and quality of parent- and child-reported conflict from 11 to 14 years (Burt, McGue, Krueger, & Iacono, 2005). Moreover, Capaldi et al. (1994) reported stability of mothers', fathers', and sons' affect (e.g., anger, contempt, anxiety/tension, humor, and neutral) while discussing a conflictual topic from grade 8 to 10 (also see Conger & Ge, 1999). Unlike in most prior research, we examined and predicted stability for positive as well as diverse negative reactions in a conflictual context and, like Conger and colleagues (Conger & Ge, 1999; Scaramella & Conger, 2004) and Burt et al. (2005), focused on quality of affect (e.g., intensity and diversity of reactions) rather than reports of frequency of conflict.

In addition to inter-individual stability, one might expect some changes in mean levels of CRs across adolescence. Adolescence is often divided into early (ages 10-13), middle (14-17), and late (18-early 20s) adolescence (Smetana et al., 2006). Our sample included adolescents with a mean age of 13 at T1 and 15 at T2. Although there is some overlap due to the range of ages at each time point, we investigated mother-adolescent conflict mostly in early to middle adolescence. Many important biological (e.g., puberty), cognitive, and social changes occur in early adolescence and create a disequilibrium in the mother-adolescent relationships (Collins & Steinberg, 2006). With the advent of puberty and adolescence, autonomy becomes increasingly important to youths, mother-adolescent relationships become temporarily less close, and the amount of time that mothers and adolescents spend together decreases (Smetana et al., 2006; Collins & Steinberg, 2006). These changes might be reflected in the nature of mother-adolescent conflicts.

Indeed, in a meta-analysis, Laursen, Coy, and Collins (1998) found a decline in the frequency of parent-adolescent conflict across adolescence (perhaps due partly to a decline in the amount of interaction) and an increase in the affective intensity of these conflicts from early to middle adolescence. Supporting this trend for frequency of conflict, Trentacosta et al. (2011) identified four trajectories of mother-reported frequency of mother-son conflict from age 5 to 15. Three groups, including the majority of the sample, exhibited declining frequencies of conflicts from childhood to adolescence and one smaller group reported stable, high levels of conflict. Overall, the existing literature suggests that a new equilibrium is gradually reached for most youths, with late adolescence being characterized by fewer and less intense parent-adolescent conflicts than in early adolescence and, for conflict intensity, than in middle adolescence (Laursen et al., 1998).

A limitation of the existing work on age-related mean level changes in conflict, however, is the reliance on reported perceptions of conflict, and often only perceptions of frequency of conflict. Laursen et al. (1998) noted that only 3 of 24 studies reviewed included observations of conflict behavior. Longitudinal research focusing on observed CRs rather than general perceptions is especially scarce. Scaramella and Conger (2004) argued that frequency of disagreements is a poorer measure of parent-adolescent conflict than are measures that capture the degree of anger and hostility because the latter better reflect emotional volatility between parents and youths. They further suggested that self-reports of conflict reflect the personal characteristics of informants as much or more than the nature of parent-youth conflict. Furthermore, findings on intensity/quality (rather than frequency) of parent-adolescent conflict vary somewhat across methods (see Laursen et al., 1998; Scaramella & Conger, 2004).

Prediction of Youths' Problem Behaviors from Mothers' and Youths' Conflict Reactions

There is a large body of work linking quality of parenting to youths' problem behaviors (Dodge, Coie, & Lynam, 2006). The quality of parental CRs likely partly reflects more general parenting attitudes and practices; indeed, maternal reactions (particularly anger, positive reactions, and hostile reactions) during a mother-adolescent conflict discussion have been predicted by measures of general parenting behavior 2 and 4 years earlier (Eisenberg et al., 2008). Thus, as found for general parenting, the quality of mothers' reactions when discussing conflictual issues with their adolescents might predict adolescents' problem behaviors.

Relations between conflict and problem behaviors have been investigated, but seldom using observations or longitudinal data. In their analyses of trajectories of mother-reported conflict with sons from age 5 to 15, Trentacosta et al. (2011) found that youths in dyads with a stable high or high frequency but declining levels of conflict had higher levels of anti-social behavior at age 15 compared to those in the two trajectories characterized by moderate or low and declining conflict. Others have found significant relations between parent-reported conflict with their adolescents and youths' concurrent self-reported and observed antisocial behavior (Klahr, Rueter, McGue, Ianoco, & Burt, 2011) and conduct problems 4 years later (but not vice versa; Klahr, McGue, Ianoco, & Burt, 2011).

The aforementioned studies usually relied on reports of conflict rather than observations (although Klahr, Rueter, et al., 2011, had an observed measure of coercive parenting). Furthermore, conflict typically has been assessed globally rather than by investigating the specific affective quality of conflicts; little is known about the specific CRs predicting later problem behaviors. Based on the work of Gottman on marital relationships, not all conflict negativity is equally detrimental. Gottman (1993) found that while acts of contempt,

stonewalling, defensiveness, and criticism during a conflict discussion were very detrimental to the relationship, anger was not predictive of divorce, suggesting that verbal negativity is more problematic than nonverbal negativity. Thus, verbal negativity might be more detrimental to adolescents' problem behaviors than is parental nonverbal negativity.

Relatively little is known about the association between mother-adolescent conflict and internalizing problems. Mothers' dampening of adolescents' positive affect during an interaction--which could happen when mothers do not respond positively to youths' positive emotion CRs--has been associated with youths' depressive symptoms (Yap, Allen, & Ladouceur, 2008). Recently, parental aggression (e.g. anger, contemptuous affect, belligerence, and cruel and argumentative behavior) observed during family interactions (not conflict discussions) when children were 10 to 12 years old predicted greater depression and anxiety in adolescents 2 ½ years later, whereas higher levels of positivity (affective and verbal) predicted lower depression (Schwartz et al., 2012). Thus, we hypothesized that adolescents' internalizing problems would be predicted by less positive and more negative CRs. Adolescents of mothers who are less positive and also express high anger and verbal negativity in conflicts might withdraw from the relationship and feel alone, which could contribute to internalizing problems.

Prediction of Mothers' and Youths' Conflict Reactions from Problem Behaviors

Mother-adolescent conflict behavior probably is affected by ongoing characteristics of the child. Social relationship models would predict that change in conflict originates from earlier characteristics. Adolescents who display externalizing behaviors are likely to exhibit anger and hostility in their interactions with others (Deater-Deckard & Wang, in press). For example, during a family solving-problem discussion, 7- to 14-year olds with conduct disorders, compared to those without, displayed higher levels of anger and depressed affect, more negative verbal content, and less ability to problem solve with parents (Sanders, Dadds, Johnston, & Cash, 1992). This general negativity might be reflected not only in the way they engage in a conflict discussion with their mother, but also in how their mother reacts. In fact, delinquent youths are often part of families in which both parents and children/adolescents display high levels of conflict and aggression (Kim, Conger, Lorenz, & Elder, 2001), and hostile parent-child conflict and youths' problem behaviors are interrelated (Patterson, 1982).

Findings on the direction of relations between parent-child conflict and youths' externalizing problems are inconsistent. Eisenberg et al. (2008) reported prediction of mothers' and youths' positive and negative CRs by youths' externalizing behaviors, concurrently and up to 4 years earlier, but they did not control for prior levels of CRs. Some investigators have found bidirectional relations between reports of parent-child conflict and adolescents' externalizing when controlling for stability of constructs (Burt et al., 2005) whereas others have found that parents' reports of conflict with their adolescents predict subsequent conduct problems but not vice versa (Klahr, McGue, et al., 2011). Based on the social relationship perspective and some evidence of prediction in both directions, we expected change in the quality of CRs to be predicted by youths' earlier externalizing problems and vice versa.

Present Study and Hypotheses

As part of a longitudinal study (Blinded for review), mother-adolescent conflict interactions were observed initially when adolescents were an average of 13 years old and again 2 years later. The facial and verbal CRs of mother-adolescent dyads were coded. At both assessments, mothers, fathers, and teachers reported on adolescents' externalizing behaviors.

Adolescents reported on their internalizing problems (only at the second assessment). We expected some inter-individual stability in youths' and mothers' CRs over the 2 years but were unclear, due to inconsistent prior findings, whether the affective quality of CRs would change over this period.

In addition, we expected quality of CRs at the initial assessment to predict youths' problems behaviors two years later. We did not expect every type of CR to be related to subsequent problem behaviors; greater prediction of subsequent externalizing problems was expected for initially hostile CRs than for less aversive CRs (including positive reactions), based on findings discussed earlier. Maternal and youths' positive CRs were expected to be especially predictive of internalizing problems because mothers with low positivity might dampen their youths' positive affect, and relations between less positivity and more depression have been shown. Moreover, because parents are likely to react negatively to youths' problematic behavior, we expected initial levels of adolescents' externalizing problems to predict more intense negative CRs (for both mothers and adolescents) at the 2-year follow-up, especially for anger and hostile verbal CRs, even when controlling for initial levels of CRs. Conversely, a relative increase in positive CRs was expected to be predicted by few externalizing problems two years prior.

Method

Participants

Parents and adolescents came to the laboratory for a 4th and 5th longitudinal assessment. At the first time point of the study, 199 children and their parents participated (49% girls, M age = 89.50 months, SD = 13.90). Most of the children came from middle-class Euro-American, non-Hispanic families (79%), with the remainder being identified as Hispanic (10%), African American (4%), Native American (2%), Asian American (less than 1%), or of mixed origins (5%). Annual family income ranged from \$8,000 to \$150,000 (M = \$46,500). Mean years of education was 14.60 for mothers, and 14.99 for fathers.

Six years later at the 4th wave (henceforth referred to as T1), 167 families participated. Of those, 139 adolescents (67 boys, M age_{boys} = 13.50 years, 72 girls, M age_{girls} = 13.40 years) came to the laboratory. At the 5th wave (referred to as T2), 8 years after the initial assessment, 142 families participated in some manner. Of those, 125 adolescents (60 boys, M age_{boys} = 15.36 years, 65 girls, M age_{girls} = 15.29 years) came to the laboratory. Among the families who came to the laboratory, 126 at T1 and 111 at T2 were mother-adolescent dyads. Data from the observations of the 13 and 14 non-mothers who came in to the laboratory at T1 and T2 (5 common to both T1 and T2), respectively, were not included in the analyses because the conflict interactions might differ from those of mother-adolescent (Laursen et al., 1998); they were, however, included in the reliability analyses described in the method section.

In addition, at T1 and T2, 135 and 112 fathers, respectively, and 150 and 137 teachers completed questionnaires. In the resulting data set, 131 children (63 boys, 68 girls) remained with conflict data at T1 and/or T2 and 168 (82 boys, 86 girls) had data at T1 and/or T2 on at least some of the measures (e.g. questionnaires).

Attrition Analyses

Two MANOVAs were performed on variables from T1 to assess differences between attrited and non-attrited participants on (1) mother-adolescent CRs and (2) family income and mothers' and fathers' education. A t -test or chi-square was used to test for attrition effects for father-reported, mother-reported, and teacher-reported externalizing problems and child race. The 27 families with no data at T2 who had participated at T1 were

compared to the rest of the T1 sample. The multivariate F for CRs was not significant. However, the mothers of the attrited families displayed more negative verbal CRs, $F(1, 123) = 9.14, p = .003$. Mothers' education, fathers' education, and household income were lower in the attrited families, $F(1, 137) = 9.98, 7.67$, and $6.94, ps = .002, .006, .009$, respectively, $F(3, 135) = 4.82, p = .003$. Finally, fathers' (but not mothers' or teachers') reports of externalizing were higher among the attrited families than non-attrited families, $t(133) = -2.87, p = .005$. Based on these results, the data were not missing completely at random (MCAR) but it is reasonable to assume the pattern of missing data is missing at random (MAR). Although it is not possible to prove if the data is MAR, serious violations are relatively rare (see Enders, 2010). Furthermore, the two main models (see results section) were also run with mothers' education, fathers' education, and household income at T1 as correlates of the missing data. This procedure increases the chances that MAR is satisfied (Muthén & Muthén, 2010; Enders, 2010) and there were no differences in the significance of the paths estimated aside from the appearance of a new marginal path between adolescents' humorous reactions at T1 and fewer internalizing problems at T2.

Procedure

Both at T1 and T2, adolescents and a parent (usually the mother) came to the laboratory. As part of the 1 to 1.5 hour visit, the dyad discussed for 6 minutes conflictual issues. Interactions were taped for subsequent coding with a hidden camera (with parental consent). Furthermore, earlier in the visit and/or at home, parents completed questionnaires. Adolescents filled in questionnaires earlier in the visit. At the end of the visit, adolescents were debriefed, given a small gift, and the parents were paid. Parents also provided consent for teachers' reports. Fathers were mailed the questionnaire and provided with a stamped and labeled return envelope.

Measures

Mother-adolescent conflict interaction—Mother-adolescent conflict was assessed twice, two years apart.

Conflict discussion procedure—At T1, mothers and youths separately indicated which of 12 potential sources of conflict (with the option to name a different source) had been an issue for them in the past month and rated each for how upset it made them (1 = not at all upset to 5 = very upset; Prinz, Foster, Kent, & O'Leary, 1979). Then they picked the three issues that made them feel most upset and ranked them. A graduate research assistant selected the three most highly rated topics for the discussion (trying to select mutually nominated topics; some priority was given to topics that mothers saw as conflictual if there was not agreement to ensure that mothers were emotionally engaged in the discussion; see Blinded for details).

During the discussion, the mother and adolescent were seated across from each other at a small table upon which were placed three reminder cards with the topics to discuss. The experimenter (same-sex as the child) instructed them to discuss the first issue (and go to the other issues if they had time) and to try to come up with a joint solution. The experimenter said he or she would return in "5 to 10 minutes" and left the room for 6 minutes. The interaction was videotaped with split-screen camera to obtain a clear view of both participants.

At T2, mothers and adolescents separately named three times (and named the worst time) when they had had a problem, argument, or dispute. The checklist from T1 was given to them as examples if needed. The topic for discussion was the worst one named by the mother. Two additional topics were given to the dyad in case they resolved the first topic of

discussion within 6 minutes. For the 20% of dyads who picked the same worst topic, the additional topics were the mother's and the adolescent's next worst incident; for the others, the additional topics were the worst topic listed by the youth and the mother's second worst incident. The discussion proceeded as at T1. The topics named were coded to match the categories of the issues checklist used at T1 (kappas on 24% of the data were .90 and .94 for youths and parents). At both waves, the same four issues were the most frequently named *most conflictual* for the dyad: school (13.6% at T1, 23.6% at T2), respect/manners (11.0% at T1, 13.2% at T2), how family gets along (19.5% at T1, 12.3% at T2), and cleaning up/chores (34.7% at T1, 11.3% at T2).

Coding of the conflict discussion—At T1 and T2, four trained individuals coded affective and verbal CRs when the dyads' discussion was on-topic. The two main coders at T2 were the reliability coders at T1. Most codes were adapted from other coding systems (see *Blinded* for review).

Affect codes: Every 10 seconds, youths' and mothers' positive affect and anger were coded (1=*low* to 7=*high*). Facial expressions, body language, and tone of voice were considered when rating affect. At T1, intraclass correlations (ICCs) across raters for positive affect and anger were .93 and .74 for parents and .92 and .71 for adolescents at T1 (coded for 23% of dyads); at T2, they were .92 and .65 for parents and .88 and .74 for adolescents (computed for 19%-21% of the dyads). At both time points, composites were created for positive affect and anger by averaging on-topic affect ratings of the main coder across 10-second units.

Verbal codes: The number of on-topic conversational turns ranged from 6 to 67 with a mean ranging from 32 to 39 for adolescents and parents at each wave. Each conversational turn could have several of the 13 (at T1) or 15 (at T2) codes (see Table 1), although some verbiage was not codable. The numbers of codes in a conflict discussion ranged from 0 to 76 (*M* for parents = 30 at T1 and 12 at T2; *M* for adolescents = 20 at T1 and 10 at T2). Agreement at T1 and T2 (kappas for 22% and 18% of participants) was .80 and .74 on the parents' codes, and .83 and .82 on the adolescents' codes. Rate per minute was obtained by dividing the frequency of each code by minutes of on-task discussion.

At both time points, very infrequently used categories were dropped (i.e., mothers' and adolescents' expressing own feelings, talking about other's feelings, talking about emotions in general, changing subject, and adolescents' validation/praise). Agreements and maternal eliciting opinion were also dropped because reasonable factors could not be obtained otherwise (they were uncorrelated or correlated weakly with other verbal categories). The remaining verbal codes were mothers' use of validation and praise and mothers' and adolescents' humor, disagreements, put down/derogate, derisive humor/sarcasm, coerce/assert, and interrupt.

Aggregation of the conflict discussion codes: In *blinded for review*, factors were computed with the conflict variables at T1. For adolescents, the 6 verbal codes and the 2 affect codes were used as indicators of 4 factors: (1) positive affect, (2) humor, (3) anger affect, and (4) the five negative verbal codes. For mothers, the 7 verbal codes and the 2 affect codes were indicators of 4 factors: (1) positive affect, validating comments and humor, (2) anger affect, (3) disagree, derisive humor, interrupt, and (4) put down and coerce. We tried replicating those factors at T2; however, modification indices indicated that the five negative verbal codes needed to be on the same factor. Because the CFA at T1 also fit the data well with the one negative verbal factor (see *Blinded*), we retained a 3-factor model for mothers: (1) positive affect, validating comments and humor, (2) anger affect, and (3) the five negative verbal codes. The factors for adolescents were the same as found previously. All four CFAs fit the data fairly well, χ^2 s were nonsignificant except one $p < .03$; *CFIs* = .94-.1.00; *Root*

Mean square Error of Approximation (RMSEA) = .00-.09, *Standardized Root Mean Square Residual (SRMR)* = .03 -.06. Then we tested for invariance over time of those factors, separately for adolescents and mothers. We first tested a fully constrained model in which the indicators for each of the latent factors were constrained across times. Then we released the loadings for indicators one by one and used a chi-square difference test to test if the indicator was invariant across times. The final CFAs are presented in Table 2.

We obtained composites for each person at each assessment by summing the variables and weighting them according to their unstandardized loading on the CFAs. For each of the latent constructs with multiple indicators, a minimum of 2 indicators was invariant over time so the constructs are considered at least partially invariant over time (Muthén & Muthén, 2008).

Adolescents' externalizing and internalizing behaviors

Mothers, fathers, and teachers rated (1 = *never*, 4 = *often*) youths' externalizing behaviors at T1 and T2 using 23 items from the Child Behavior Checklist (Lochman and the Conduct Problems Prevention Research Group, 1995; e.g. "Argues," "lies"; alphas = .92-.96). Inter-reporter correlations ranged from .28 to .43 at T1 and from .31 and .73 at T2, $ps < .05$.

At T2, adolescents rated (0 = *not true*; 2 = *very or often true*) the degree to which they were withdrawn (e.g., "I keep from getting involved with others"), had somatic complaints (e.g., "I feel overtired"), and were anxious and/or depressed (e.g., "I am unhappy, sad, or depressed") on the Youth Self Report (Achenbach, 1991). To avoid confounding with temperament scales, based on experts' ratings (see Blinded, 2004, for details), four items were removed ("I am self-conscious or easily embarrassed"; "I don't have much energy", "I am shy", and "I would rather be alone than with others"). An aggregate composite of internalizing problems was created by averaging the remaining 25 items ($\alpha = .87$). Internalizing was not significantly related to mothers', fathers', or teachers' reports of externalizing behaviors at T2.

Results

Means and standard deviations are presented in Tables 3 and 4. Although adolescents' humor at T1 and adolescents' negativity at T2 were skewed, all analyses were performed with the variables untransformed to allow for consistency in the analyses.¹

Inter-Individual (Rank-Order) Stability and Mean Level Change in Conflict Reactions

In zero-order correlations, T2 CRs were related to analogous T1 CRs (see Table 3).

Mean level change over time—As presented in Table 3, using GLMs, youths' verbal negativity and mothers' negativity, anger, and positive CRs declined in frequency over the two years, $F_s(1, 104-105) = 64.17, 80.89, 9.16, \text{ and } 5.86, ps < .001, .001, .01, \text{ and } .05$ (partial $\eta^2 = .38, .44, .08, \text{ and } .05$). The effect sizes indicated an especially sizable drop over time in adolescents' and mothers' verbal negativity during the conflict discussion.

¹The analyses were also run with those variables transformed. In the correlations and mean differences analyses, few differences were observed. The significant paths in the SEM models using the transformed variables remained significant.

Longitudinal Relations of Conflict Variables with Adolescents' Outcomes (Table 4)²

Prediction of problem behaviors from earlier conflict reactions—Adolescents' T2 externalizing behaviors was fairly consistently positively predicted by maternal and adolescents' verbal negativity and anger at T1, albeit not as consistently for teachers' as parents' reports. Although adolescents' humor and positive displays did not predict externalizing behaviors, maternal displays of positivity at T1 usually predicted lower mother- and father-reported externalizing behaviors at T2. Adolescents' internalizing at T2 was not correlated with T1 CRs.

Prediction of conflict reactions from earlier externalizing problem behaviors—Mothers' and fathers' reports of T1 externalizing behaviors generally predicted more T2 anger, and sometimes more negativity and, inversely, positive maternal CRs. T1 externalizing problems did not predict adolescents' T2 CRs.

Confirmatory Factor Analyses

Prior to computing the structural SEMs, four confirmatory factor analyses (CFAs) were run to test the unidimensionality of the latent constructs: one with mothers' CRs and externalizing problems at T1, one with adolescents' CRs and externalizing problems at T1, one with mothers' CRs, externalizing problems, and internalizing problems at T2, and one with adolescents' CRs, externalizing problems, and internalizing problems at T2 (given our *n*, we could not include all variables in a single model). Each of the weighted CR composite scores was used as a separate construct. Externalizing problems had 3 indicators (mother, father, and teacher reports), and internalizing problems were indicated by self-reports. All variables used in the final models were unstandardized and untransformed. When only one indicator was available for a behavioral latent construct, its error variance was set to zero. In addition, as is often the case in structural equation modeling (SEM), we correlated the error variances from same-reporter indicators (Kenny & Kashy, 1992) when indicated by modification indices. All the models fit the data at least adequately and most models fit very well, with all chi-squares being nonsignificant, *CFIs* ranging from .995 to 1.00, *RMSEAs* ranging from .00 to .02, and *SRMRs* ranging from .03 to .04. All indicators loaded significantly on the constructs.

SEMs: Further Investigation of Stability, Change, and Relations with Adolescents' Problem Behaviors

We calculated SEM models to examine the inter-individual stability over time of the CRs, as well as to investigate the relations between adolescents' problem behavior and CRs both within and across time. Mplus 5.1 (Muthén & Muthén, 2008) with maximum likelihood estimation was used. Based on the CFAs, two models, one for mothers' CRs and one for youths' CRs, were estimated to investigate bi-directional relations between CRs and problem behaviors. The models tested prediction of T2 CRs from T1 CRs and externalizing problems when controlling for the stability of the latent constructs. Moreover, to examine reciprocal relations, T1 CRs predicted T2 problem behaviors.

The models fit well and all the loadings were significant (see Table 5). For each model, we tested invariance of the latent construct of externalizing problems over time (i.e., constrained the indicators of externalizing over time because there was more than one indicator) and, using a chi-square difference test, tested whether the constrained model fit as well as the

²In general, there were no significant differences across sex in the correlations. However, maternal anger and negativity at T1 correlated more often with externalizing problems for girls than boys.

unconstrained model. The indicators for externalizing problems could be constrained (see Table 5).

Mothers' CRs and adolescents' problem behaviors—Externalizing problems and maternal positive CRs were stable across time (see Figure 1). The stability of maternal negativity across time was near significant and maternal anger was not stable across time. Higher T1 maternal anger and positive CRs uniquely predicted fewer T2 internalizing problems. Youths' T1 externalizing problems uniquely predicted greater T2 maternal anger. Although the relation was only near significant, adolescents' externalizing problems at T1 also predicted more maternal negativity at T2. These across-time relations were unique of one another and of prediction by other T1 CRs. Most constructs were correlated in the expected ways within time.

Adolescents' conflict reactions and adolescents' problem behaviors—

Adolescents' CRs and externalizing behaviors were consistent across time (see Figure 2). Even when taking into account interrelations among the variables at T1 and the stability of the conflict and externalizing constructs, T2 internalizing and externalizing problems were positively correlated with adolescents' T2 conflict anger; T2 internalizing was negatively correlated with adolescents' T2 positive CRs; and adolescents' T2 externalizing behavior was positively related to their negative CRs at T2. Over and above these across-time stability coefficients and concurrent associations, T2 externalizing behavior was near significantly positively predicted by adolescents' T1 positive CRs, a finding that was not consistent with the correlations and might be a suppression effect.³

Discussion

In the present study, we examined inter-individual (or rank-order) stability of mothers' and youths' CRs across two years, mean-level changes in CRs, and relations between CRs and adolescent problem behaviors over two years. In the SEM analyses, the latter relations were examined while controlling for initial levels of all variables except adolescent internalizing problems. Thus, we examined relations between CRs and problem behaviors using a fairly stringent test of causal relations.

Several key cross-time findings were obtained. First, there often was inter-individual stability in CRs over time, albeit less for mothers than youths when concurrent correlations among CRs and adolescents' externalizing problems were taken into account. Second, adolescents' verbal negativity, as well as mothers' verbal negativity, anger, and positivity during the conflict discussion, declined with age. Third, in the correlations or the SEM analyses, mothers' CRs predicted and were predicted by adolescents' problem behaviors more often than adolescents' CRs. In the models, with stability of all variables except internalizing problems taken into account, mothers' anger and positivity predicted fewer internalizing problems 2 years later, and externalizing problems predicted more maternal anger 2 years later.

Inter-Individual Stability of the Conflict Reactions

Based on the social relationship perspective, we predicted stability in the CRs over time. Within the SEM framework (and consistent with the correlations), all four adolescent CRs (anger, negative verbalizations, positivity, humor) were consistent across time. Although T1

³Similar results were obtained when we tested the models including sex as a covariate predicting T2 variables with which it was significantly related. Very similar results also were obtained when we computed these models using maximum likelihood estimation with robust standard errors (*mlr*) to test whether the non-normality of some of our variables led to biased results.

maternal anger, negativity, and positive CRs were significantly related with analogous CRs at T2 in zero-order correlations, in the SEM, only the autoregressive path for maternal positive CRs was significant whereas the path for negative verbal CRs was near significant. The lower across-time stability for mothers' CRs in the SEMs was surprising given the stability of conflict-related reactions in our correlations and in other studies (Capaldi et al., 1994; Eisenberg et al., 2008; Kim et al., 2001). Some of the variance in T2 maternal anger and, to some extent, negative CRs was accounted for by adolescents' T1 externalizing problems, which may have reduced the stability paths in the maternal models. Thus, the data suggest that mothers' CRs might be partly shaped by adolescents' problem behaviors. Nonetheless, to some degree, the findings fit the social relationships model which would predict more continuity than discontinuity in the CRs and that, when rank-order change occurs, it is due in part to their earlier characteristics/behaviors.

These results, taken together with results from prior longitudinal studies, suggest that adolescence is characterized by overall inter-individual stability in the frequency of conflict (Trentacosta et al., 2011), general aspects of parent-child conflicts (Burt et al., 2005), and specific verbal and affective CRs of adolescents (this study). Although mothers' CRs did show some inter-individual consistency over time, they appeared less stable over time than adolescents' reactions and might be more driven by adolescents' characteristics (see below for further discussion on this topic). These findings highlight the importance of the mother-child relationship prior to and early in adolescence and support the potential worth of interventions prior to adolescence.

Mean Level Changes of the Conflict Reactions

Prior research pertaining to changes in the affective intensity of mother-adolescent interactions, including during conflict discussion, has been somewhat inconsistent. In the current study, mothers displayed less verbal and emotional positivity and negativity (including anger) over time, and youths displayed fewer negative verbal reactions. As children move into the mid to late high school years, the adolescent-mother relationship appeared to be less volatile, perhaps because mothers grant their children more autonomy and allow them to increasingly manage decisions about their personal life (Collins & Steinberg, 2006). It is also possible that mothers become habituated to conflict as the teenage years pass, and react with lower emotional intensity. An analysis of the change in CRs over time might show that in comparison to mothers of first-borns, mothers of latter-borns, who are more experienced, are already habituated to conflict and do not show as much decline in their negative CRs with age. Alternatively, mothers and youths may have exhibited less emotion at T2 as a consequence of engaging in the conflict discussion once before. Finally, due to the continuing development of regulatory skills across adolescence (Casey, Jones, & Hare, 2008), adolescents may be better able to regulate their negative emotion with age. In any case, the lack of consistency in findings in regard to change across adolescence in mother-youth affective exchanges (e.g., Laursen et al., 1998; Scaramella & Conger, 2004) supports the need for additional research contrasting both various methods of assessing CRs (e.g., reports versus observations) and measures of different aspects of conflict (e.g., frequency versus affective intensity).

Prediction of Problem Behaviors from Conflict Reactions

Externalizing behaviors—As hypothesized, in correlations, mothers' high negativity, anger, and low positivity, and adolescents' high negativity and anger in the conflict discussion at T1, tended to predict more externalizing behavior, as reported by mothers, fathers, and sometimes teachers, at T2. However, there were no significant unique across-time relations between mothers' or adolescents' T1 CRs and youths' T2 externalizing problems in the SEMs when controlling for stability in CRs and externalizing problems,

perhaps due to the significant stability of youths' externalizing behaviors. Thus, there were ongoing associations between youths' externalizing behaviors and youths' angry and negative CRs as well as mothers' angry, negative, and positive reactions, but CRs at T1 did not appear to predict change in externalizing problems. It is possible that a causal link was established between the two variables at a younger age and remained stable as children moved into adolescence. However, the occurrence of concurrent T2 correlations in the models between externalizing behaviors and adolescents' and mothers' negativity as well as adolescents' anger reactions, even when controlling for stability and including correlations between these variables at T1, suggests that this relation is continuing to emerge over time and is not entirely accounted for by prior relations, although causality cannot be discerned. In the future, studying CRs in mothers and young children would allow for examination of the stability of these constructs over a longer developmental span and enable researchers to study the early emergence of relations between CRs and problem behaviors.

Internalizing behaviors—Although there were no available data on adolescents' internalizing problems at T1, it was of interest to examine relations of CRs to internalizing, in part because of the paucity of research on this issue. As hypothesized, in correlations, less positivity in the conflict discussion at T2 was related to more internalizing symptoms. Furthermore, in the SEMs, T1 maternal positivity and anger were uniquely, inversely related to T2 internalizing problems. These results are consistent with previous work showing that mothers of depressive adolescents tend to dampen youths' positive affect (Yap et al., 2008, Schwartz et al., 2012). If, as suggested by Scaramella and Conger (2004), more positive *and* negative emotions are expressed in close relationships, low levels of maternal positivity and anger may reflect lack of involvement with the adolescent or reflect mothers' depressive style, which could contribute to adolescents' internalizing problems. This is also consistent with Gottman's work (1993) which suggests that verbal negativity is more problematic than nonverbal negativity. Although too much anger may be harmful for children, some expression of anger might be adaptive. These results highlight the importance of investigating qualities of mother-adolescent conflicts rather than simply the valence of CRs. Identifying key behaviors that foster positive outcomes and adjustment difficulties such as problem behaviors can help practitioners and researchers design prevention and intervention programs that target these behaviors.

Prediction of Conflict Reactions from Externalizing Behavior

In the SEM with mothers' CRs (as in the *rs*), adolescents' T1 externalizing predicted greater T2 maternal anger (controlling for prior levels of maternal anger). Moreover, there were significant zero-order correlations between T1 mother-reported externalizing behaviors and higher maternal negativity and lower positivity at T2. The finding that adolescents' acting out problems predicted an increase in mothers' conflict-related anger across time is consistent with some other studies (e.g., Kim et al., 2001) suggesting that adolescents' behavior can shape mothers' behavior toward them across time. Few investigators, however, have found an evocative effect of youths' problem behavior on the quality of mothers' behavior when controlling for stability in the latter (as well as concurrent covariation) and testing for unique effects of problem behavior (separate from concurrent CRs) to quality of parenting.

In the SEMs (and consistent with correlations, especially for youths' anger), youths' externalizing behavior was correlated with higher adolescent anger and negative CRs within both assessments. However, T1 externalizing problems were not related to adolescents' T2 CRs in either the model or correlations. Thus, there was no evidence that youths with externalizing symptoms become more negative over time in conflict-related interactions with their mothers than their peers.

Conclusions

Overall, the findings support inter-individual consistency in mothers' and especially adolescents' CRs, as well as a decline in their intensity from T1 to T2. The results from the SEMs also suggest that the potential effects of adolescents' problem behaviors on maternal CRs surpass the effects of mothers' CRs on adolescents' problem behavior. The path coefficient from adolescents' externalizing behavior at T1 to mothers' T2 anger was much stronger than that from mothers' CRs at T1 to internalizing problems at T2. Considering both the mother and adolescent models, it appears that although adolescents' CRs remain fairly stable (in rank order) over time (and might have been shaped by prior children characteristics and maternal practices, see Eisenberg et al., 2008), mothers' reactions are more subject to change. Change in maternal CRs appears to be driven at least partly by adolescents' prior behavior.

Strengths, Limitations, and Future Directions

The strengths of this study include the use of a multi-method, multi-reporter approach and a longitudinal model allowing for control of initial levels of most variables. Thus, the analyses were very conservative and the obtained effects were unique from the effects of other predictor variables and, except for internalizing, reflected change in responding over time. Controlling for stability likely explains why we found relatively few significant across-time paths in the SEMs, especially for adolescents' CRs (which were more stable than mothers').

The data in this study are essentially correlational and cannot prove causal relations. Indeed, genetic factors common to mother and child probably account for some of the relations obtained here. However, there is evidence that the relation between parent-child conflict and the development of externalizing problems is influenced by shared environmental factors (Burt et al., 2005; Klahr, McGue, et al., 2011). Thus, even if genetics does play a role in the occurrence of both parent-adolescent conflict and youths' externalizing problems, parent-child interactions also appear to contribute to their development.

Furthermore, solely the mother-adolescent dyad was examined. Differences in the frequency and intensity of mother-adolescent and father-adolescent conflicts have been reported (Laursen et al., 1998; Scaramella & Conger, 2004). Our findings with mothers may not generalize to fathers. In addition, only adolescents' reports of internalizing were available and only at one time point.

Future research should further explore the unique effects of earlier adolescents' problem behaviors and CRs on later ones. The results suggesting that the potential effects of adolescents' problem behaviors on maternal CRs surpass the effects of mothers' CRs on adolescents' problem behavior might indicate that global assessments of functioning (e.g., externalizing) are more predictive than specific reactions. However, these results could also be explained by another aspect of measurement. Externalizing problems, assessed through questionnaires at multiple time points, might capture more variability than shorter observational indices of CRs. Research investigating these relations over a longer developmental span, using observational measures and questionnaire measures of both conflict quality and problem behaviors is needed.

The rather small sample size forced the use of smaller models rather than one inclusive one. In addition, the sample, although somewhat diverse, was primarily working and middle-class, as well as Euro-American, so the results cannot be generalized to other populations.

Although the goal of the paper was not to address bi-directional relations between mothers' and adolescents' CRs, they likely are interrelated and this issue merits attention. In addition,

mothers' and adolescents' CRs are likely related to broader aspects of the mother-adolescent relationship and may mediate the effects of general quality of parenting on other variables. Thus, it would be useful to examine prediction by CRs of children's problem behaviors, unique from the effects of general parenting style/practices.

Despite the study's limitations, it is unusual in delineating potentially causal relations of youths' problem behaviors to mothers' and adolescents' subsequent CRs when controlling for initial levels of most variables and using rich observational measures of quality of conflict. The findings suggest over time relations between behaviors in a specific context (conflict discussions) and more general adjustment indices. Specifically, adolescents, through their externalizing behavior, may affect the negativity of future maternal reactions when dealing with conflictual issues, and mothers, through their early CRs, might affect adolescents' internalizing problems. Conflict discussions appear a promising and useful context in which to study adolescents and implement interventions designed to improve adjustment.

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Figure 1.

Model of Mothers' Conflict Reactions and Adolescents' Problem Behaviors. Only significant and marginally significant correlations and paths are shown here. Unstandardized estimates are on top, standard errors are in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .10$.

Figure 2. Model of Adolescents' Conflict Reaction and Adolescents' Externalizing and Internalizing Problems. Only significant and marginally significant correlations and paths are shown here. Unstandardized estimates are on top, standard errors are in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .10$. Ado = adolescents.

Table 1
Summary of the Verbal Conflict Discussion Categories (Means based on sample of mothers)

-
- **Validation/Praise/Endearment** ($M1_{parent} = .34$; $M2_{parent} = .26$): Verbal expressions of support, empathy, approval of a person's behavior, appearance, or state, apologies, personalized praises and compliments, and physical affection that place value on the other person (e.g., "I think that you did a fantastic job" or "I'm sorry I hurt your feelings").
 - **Humor/Tease** ($M1_{parent} = .13$; $M1_{ado} = .18$; $M2_{parent} = .15$; $M2_{ado} = .17$): Verbal expressions of joke, gentle wit, absurd or exaggerated statements, questions, or suggestions, mimics made in lighthearted fashion without intent to offend (e.g., "If you can't talk on the phone less, we'll just have to get a pigeon for you to send messages back and forth" or "you must be kidding").
 - **Disagree/Dispute/Challenge** ($M1_{parent} = .91$; $M1_{ado} = .99$; $M2_{parent} = .25$; $M2_{ado} = .30$): Verbal expressions disagreeing with or challenging the other's judgment (e.g., "that's not true").
 - **Verbal Put Down/Derogation** ($M1_{parent} = .47$; $M1_{ado} = .23$; $M2_{parent} = .16$; $M2_{ado} = .12$): Verbal expressions of personalized or unqualified disapproval of a person's statements of unqualified negative emotion toward the person such as name calling, humiliation, threats, criticism, or blaming (e.g., "You always do it wrong" or "Get off my back").
 - **Derisive Humor/Sarcasm** ($M1_{parent} = .16$; $M1_{ado} = .23$; $M2_{parent} = .12$; $M2_{ado} = .11$): Verbal expressions of mean-spirited humor at the other's expense, intended to hurt the other's feelings such as making fun of a person, exaggerating, or mimicking others with intent to humiliate (e.g., "You can't even do this").
 - **Coerce/Assert Dominance** ($M1_{parent} = .63$; $M1_{ado} = .18$; $M2_{parent} = .17$; $M2_{ado} = .16$): Verbal expressions demanding behavior change, or asserting force, authority, or power (e.g., "Talk back to me again and you'll get your face slapped" or "You better stop hitting your sister").
 - **Interrupts Other** ($M1_{parent} = .48$; $M1_{ado} = .82$; $M2_{parent} = .27$; $M2_{ado} = .57$): Verbal expressions explicitly attempting to cut off the other person in order to override what they were saying and to take over the conversation.
-

Table 2
Loadings of the Indicators for the CFAs Testing for Invariance over Time

Unstandardized loading						Standard errors	
Indicators	Latent Factor	T1	T2	T1	T2	Constraint	
<i>Adolescent CFA, $\chi^2(72, N = 131) = 115.06, p = .001, CFI = .92, RMSEA = .07, SRMR = .07$</i>							
Interrupt	Negative	1.00	1.00	.00	.00	yes	
Coerce	Negative	0.39***	0.39***	.08	.08	yes	
Put down	Negative	0.86***	0.23***	.18	.06	no	
Disagree	Negative	1.84***	0.71***	.35	.13	no	
Derisive	Negative	0.80***	0.19***	.18	.06	no	
Humor	Humor	1.00	1.00	.00	.00	yes	
Affect Positive	Positive	1.00	1.00	.00	.00	yes	
Affect Anger	Anger	1.00	1.00	.00	.00	yes	
<i>Parent CFA, $\chi^2(115, N = 131) = 128.17, ns, CFI = .96, RMSEA = .03, SRMR = .08$</i>							
Disagree	Negative	1.00	1.00	.00	.00	yes	
Interrupt	Negative	0.20**	0.20**	.07	.07	yes	
Coerce	Negative	0.62***	0.62***	.11	.11	yes	
Put down	Negative	0.52***	0.52***	.09	.09	yes	
Derisive	Negative	0.24***	0.67***	.05	.17	no	
Affect Positive	Positive	1.00	1.00	.00	.00	yes	
Humor	Positive	0.17***	0.17***	.03	.03	yes	
Validate	Positive	0.29***	0.12*	.07	.05	no	
Affect Anger	Anger	1.00	1.00	.00	.00	yes	

 $p < .001$,

**
 $p < .01$,

*
 $p < .05$.

Table 3

Correlations Among Conflict Variables

	T1 M neg.	T1 M Anger	T1 M positive	T1 A neg.	T1 A anger	T1 A positive	T1 A humor	T2 M neg.	T2 M anger	T2 M positive	T2 A neg.	T2 A anger	T2 A positive	T2 A humor
T1 M negativity	1.00													
T1 M anger	0.54***	1.00												
T1 M positive	-0.16 ⁺	-0.49***	1.00											
T1 A negativity	0.68***	0.36***	-0.11	1.00										
T1 A anger	0.45***	0.47***	-0.19*	0.65***	1.00									
T1 A positive	0.02	-0.24**	0.57***	0.13	-0.06	1.00								
T1 A humor	-0.08	-0.23*	0.39***	-0.11	-0.06	0.37***	1.00							
T2 M negativity	0.28**	0.29**	-0.08	0.33***	0.28**	0.30**	-0.07	1.00						
T2 M anger	0.18 ⁺	0.30**	-0.15	0.14	0.11	0.07	-0.01	0.40***	1.00					
T2 M positive	-0.01	-0.24*	0.40***	0.13	-0.05	0.26**	0.09	-0.01	-0.30***	1.00				
T2 A negativity	0.21*	0.04	-0.05	0.52***	0.26**	0.21*	-0.04	0.44***	0.12	0.15	1.00			
T2 A anger	0.33***	0.12	-0.06	0.44***	0.41***	0.18 ⁺	0.10	0.40***	0.24**	-0.08	0.49***	1.00		
T2 A positive	0.02	-0.15	0.28**	0.15	0.00	0.50***	0.08	0.13	0.04	0.65***	0.22*	-0.10	1.00	
T2 A humor	-0.04	0.05	0.13	0.05	0.10	0.06	0.24*	0.06	-0.15	0.54***	0.16	0.02	0.40***	1.00
Mean	1.69	2.01	2.17	2.10	1.69	2.15	0.18	0.57 ^a	1.80 ^a	1.98 ^a	0.90 ^a	1.68	2.12	0.17
SD	1.22	0.56	0.78	1.65	0.56	0.71	0.31	0.69	0.61	0.76	1.10	0.56	0.88	0.30

p < .001.

**
p < .01.

*
p < .05.

⁺
p < .10.

M = mothers, A = adolescents, neg = negativity.

^aThis mean was significantly different from the mean of the same CR at T1.

Table 4
Correlations of T1 Conflict Variables with Adolescents' Problem Behaviors

	T1 Conflict Variables					T2 Conflict Variables							
	Mother					Adolescent				Mother			
	Ms (SDs)	Neg.	Anger	Pos.		Neg.	Anger	Pos.	Humor	Neg.	Anger	Pos.	Humor
<i>Externalizing</i>													
T1 mothers	2.00 (0.46)	0.28**	0.37***	-0.31***	0.26**	0.37***	-0.15 ⁺	-0.15	-0.15	0.20*	0.22*	-0.21*	-0.03
T1 fathers	2.02 (0.49)	0.33***	0.33***	-0.20*	0.18 ⁺	0.36***	-0.13	-0.07	-0.07	0.19 ⁺	0.43***	-0.14	-0.03
T1 teachers	1.46 (0.55)	0.17 ⁺	0.20*	-0.16 ⁺	0.10	0.18*	-0.12	0.04	0.04	0.09	0.11	-0.15	-0.07
T2 mothers	2.02 (0.47)	0.23*	0.31***	-0.20*	0.24**	0.35***	-0.01	-0.13	-0.13	0.31***	0.36***	-0.25**	0.12
T2 fathers	1.94 (0.49)	0.34***	0.43***	-0.23*	0.25*	0.42***	-0.08	-0.08	-0.08	0.40***	0.48***	-0.22*	0.16
T2 teachers	1.41 (0.49)	0.07	0.22*	-0.08	0.10	0.18 ⁺	-0.04	0.09	0.09	0.24*	0.18 ⁺	-0.18 ⁺	0.10
<i>Internalizing</i>													
T2 ado.	0.49 (0.29)	-0.08	-0.14	-0.11	-0.05	-0.06	-0.09	-0.12	-0.12	-0.03	0.13	-0.24*	-0.08

 $p < .001$,

**
 $p < .01$,

*
 $p < .05$,

⁺
 $p < .10$.

Ado. = adolescents, Neg. = Negativity, Pos. = Positive.

Table 5
Loadings of the Indicators for the SEM Models of Figures 1-2

Unstandardized loading			Standard errors	
Indicators	Latent Factor	T1 & T2	T1 & T2	Invariance over time
Mothers' reactions, externalizing, and internalizing problems $\chi^2(44, N = 168) = 47.60, p = .33, CFI = .99, RMSEA = .02, SRMR = .05$.				
Mothers	Ext.	1.00	.00	N/A
Fathers	Ext.	1.26***	.13	yes
Teachers	Ext.	0.61***	.11	yes
Adolescents	Int.	1.00	.00	N/A
M negativity	neg. conf.	1.00	.00	N/A
M anger	anger conf.	1.00	.00	N/A
M positive	pos. conf.	1.00	.00	N/A
Adolescents' reactions, externalizing, and internalizing problems ($\chi^2(57, N = 168) = 76.24, p = .05, CFI = .97, RMSEA = .05, SRMR = .07$.				
Mothers	Ext.	1.00	.00	N/A
Fathers	Ext.	0.77***	.08	yes
Teachers	Ext.	0.47***	.09	yes
Adolescents	Int.	1.00	.00	N/A
A negativity	neg. conf.	1.00	.00	N/A
A anger	anger conf.	1.00	.00	N/A
A positive	pos. conf.	1.00	.00	N/A
A humor	humor conf.	1.00	.00	N/A

 $p < .001$.

M = mothers, A = adolescents, neg. conf. = negativity during conflict discussion, pos. conf. = positivity during conflict discussion, ext. = externalizing, int. = internalizing, N/A = not applicable because there was only one indicator for the construct.