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The Relationship of Early Adolescent Functioning to Parent-Reported and Adolescent-Perceived Interparental Conflict

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Is an adolescent's perception of interparental conflict important or is the parents' report of such conflict sufficient to predict adolescent functioning? To examine this question, a study was undertaken with 178 young adolescents and their mothers, fathers, and social studies teachers. Adolescents completed a measure of their perceptions of interparental conflict while mothers and fathers completed a self-report measure of their conflict. Teachers provided an assessment of each adolescent's cognitive and social functioning at two separate times, 1 year apart. Results indicated that both parental report, particularly maternal, and adolescent perception of interparental conflict were significantly related to adolescent cognitive and social functioning, and the magnitude of the correlations did not differ significantly. Hierarchical regression analyses were performed in which mother and father report of conflict was forced into the equation initially and adolescent perception of such conflict was allowed to enter freely. These analyses indicated that adolescents' perceptions accounted for unique variance in their functioning, beyond that accounted for by parental report. The results are discussed in terms of the specific roles that parental conflict and adolescent perceptions of such conflict play and the possible mechanisms by which each operates.

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INTRODUCTION

Research consistently has shown that interparental conflict, in both intact and divorced families, is related to difficulties in children's and adolescents' functioning, including externalizing and internalizing problems as well as deficits in cognitive and social competence (Emery, 1982; Long, Forehand, Fauber, & Brody, 1987; Shaw & Emery, 1987). Nevertheless, it remains unclear how interparental conflict negatively influences development. One possibility is that such conflict adversely affects parenting skills (Emery, 1982). Extreme conflict between parents may create inconsistent moods in either or both parents and, therefore, contribute to inconsistent parenting behavior (e.g., enforcement of rules).

Another possibility is that the observed relation between interparental conflict and child/adolescent functioning is significant for reasons other than the disruption it creates in the parents' lives and parenting skills. Rather, it may be the child's perception of the conflict that is the important variable. That is, if children perceive the conflict and view it as serious and potentially threatening to them or the family, they may display difficulties in functioning. Such a hypothesis is plausible given research showing that an individual's perception of stimuli is more motivating than the actual stimuli (Mishel, 1973). Consistent with this finding, Schaefer (1965) demonstrated that what children perceive that their parents do or say, not what parents *actually* do or say, is of most importance in affecting children's behavior. Thus, it is possible that perception of interparental conflict is more influential than is actual conflict.

Cummings and Cummings (1988) have developed a model to explain why perception of conflict may be of primary importance. They suggest that children's perceptions of interparental conflict determine how they will cope with the conflict. Given an angry envrionment (i.e., interparental conflict), children may be negatively affected by that environment if they perceive it as threatening and beyond their control. This perception can lead to coping strategies that are associated with the development of psychopathology. As Cummings and Cummings note, work in the area of children's coping strategies is in its infancy, and the association between a particular coping style and psychopathology has not been delineated. Nevertheless, the necessary first step in the process, which this study addresses, is to determine if a child's perception of interparental conflict is important. If it is, then subsequent work can address the mechanisms (e.g., faulty coping strategies) by which such conflict leads to poor functioning.

In a study designed to determine whether child perceptions of interparental conflict are adequate measures of actual conflict, Emery and O'Leary (1982) compared parental measures of marital adjustment and open marital

conflict with children's perceptions of discord in their parents' marriages. They found that children's perceptions correlated significantly with actual level of discord and that children's perceptions of such conflict were an accurate predictor of deficits in their own functioning. However, these investigators did not specifically compare children's perceptions of conflict and parental report of conflict to discern which of the two variables is the more important factor in predicting deficits in functioning or if child perceptions of conflict accounted for variance beyond that accounted for by the actual level of conflict.

One purpose of this study was to assess and compare the association between adolescent functioning and each of the following two variables: (1) adolescent perception of interparental conflict and (2) parental report of such conflict. A second purpose was to determine if the adolescent's perception of conflict contributed unique variance, beyond that contributed by the parental report, in predicting functioning. By considering each of these questions, the importance of perceptions of interparental conflict could be determined.

It was predicted that both parental report of interparental conflict and adolescent perception of conflict would correlate significantly with deficits in functioning. However, it also was predicted, in light of Mischel (1973), that the correlations between perceptions of conflict and functioning would be significantly larger than the correlation between the parent report of such conflict and functioning. In addition, we predicted that adolescent reports of parental conflict would contribute variance beyond that accounted for by the parental report.

Since data on adolescent functioning were available at two separate times, 1 year apart, both the immediate and long-term association between such conflict and functioning was examined. We predicted that significant concurrent relationships between conflict and functioning present at the first assessment would continue to be evident 1 year later. That is, interparental conflict would be correlated with current adolescent functioning as well as functioning 1 year later. Finally, since interparental conflict may be differentially related to different areas of functioning, we examined four areas: cognitive competence, prosocial competence, internalizing problems, and externalizing problems.

METHOD

Subjects

Participants were 178 young adolescents and their mothers, fathers, and social studies teachers. At the time of the first assessment, subjects ranged

in age from 10 years 10 months to 15 years 6 months, with a mean age of 13 years 4 months. Seventy-nine were from recently divorced families (in which the biological parents divorced within the previous 12 months), and the remaining 99 were from families in which the biological parents were still married. All the subjects in the divorced group were in the custody of their mothers. The average time since parental divorce at the first assessment was 5 months (range 1 month to 12 months). None of the divorced mothers were remarried.

The socioeconomic status (SES) of each participating family was determined using the Myers and Bean (1968) two-factor index of social position. The social position score for each family was calculated according to the individual with the highest educational and occupational level in the household. The Myers and Bean classification system yields possible scores ranging from 11 to 77, with lower scores indicating higher social position. Scores from the families in this study ranged from 11 to 66, with a mean score of 31, indicating that the sample was predominantly middle to lower middle class.

Families were recruited for the project through notices posted in local communities, fliers distributed at public schools, advertisements placed in local newspapers, and public service announcements broadcast on local radio stations. In addition, recently divorced parents of young adolescents were identified through local courthouse records and contacted by mail. Approximately 40% of those contacted agreed to participate. All notices and letters invited mothers and young adolescents to participate in a research project examining mother–adolescent relationships.

For each time they participated in the project, which involved a 2-hour session at a southeastern university, each mother–adolescent dyad was paid $50. Fathers of the adolescent subjects were paid $15 for completing and returning questionnaires mailed to them. Questionnaires also were mailed to each adolescent's current social studies teacher, all of whom were paid $5 for completing and returning them.

Measures

Predictor Variables. The two predictor variables were parent report of conflict and adolescent perception of parental conflict. Parental conflict was assessed by using the O'Leary-Porter Scale (OPS), a 10-item parent-completed scale developed to measure the frequency of overt parental conflict in the presence of the adolescent (Porter & O'Leary, 1980). The items are rated along a 5-point Likert-type scale ranging from "very often" to "never." The OPS yields scores from 0 to 40. Porter and O'Leary (1980) reported a test-retest reliability of the OPS over a 2-week period of .96. The correlation between

the OPS and the Marital Adjustment Test was .63. Both maternal OPS scores (MOPS) and father OPS scores (FOPS) were used. Higher scores on the OPS indicate *less* conflict; however, for purposes of this study, scoring was reversed (40-score) so that higher scores indicated more conflict.

Adolescent perception of marital conflict was appraised by the Personal Data Form (PDF). The PDF is a 30-item inventory containing statements concerning the adolescent's home and school life (Emery & O'Leary, 1982). Items are scored on a scale of 0 (not true), 1 (sometimes true), and 2 (true). Embedded within the inventory are 10 items that Emery and O'Leary (1982) found through factor analysis to load on a factor best labeled as perceptions of interparental conflict. These 10 items were used to constitute the measure of the adolescents' perceptions of interparental conflict. Higher scores on the PDF indicate more conflict.

Criterion Variables. The criterion variables were generated from school-based data obtained from the adolescents' current social studies teacher or regular classroom teacher if there was not a specific teacher for social studies. Measures were selected that allowed the assessment of four areas of functioning: cognitive competence, prosocial competence, externalizing problems, and internalizing problems. The measures used were academic grades, teacher judgment of cognitive and social competence, and teacher ratings of internalizing and externalizing behavior problems. Academic grades were obtained for math, English, science, and social studies from the adolescent's most recent report card. Letter grades were converted to a numerical measure (A = 4, B = 3, C = 2, D = 1, F = 0) and used to calculate a total grade point average (GPA), ranging from 0 to 4.

Teachers completed the Teacher's Rating Scale of Actual Competence (TRS), a 20-item scale to assess the teacher's judgment of the adolescent's competence (Harter, 1982). The TRS yields four subscale scores; for the purposes of the present study, the cognitive (TCOG) and social (TSOC) competence scales were used. The cognitive competence subscale primarily relates to academic performance and the social subscale focuses upon interpersonal peer issues. Both subscales contain 7 items with possible scores ranging from 1 to 4, where higher scores indicate higher competence. Harter (1982) reported that the factorial validity of the TRS has been investigated with two independent samples, and results have consistently identified four factors that correspond to the peer subscales. Internal consistency reliabilities for the four TRS subscales range from .93 to .96.

Teachers also completed the Revised Behavior Problem Checklist (RBPC), an 89-item scale designed to appraise adult ratings of child behavioral deviance (Quay & Peterson, 1987). Two of the six scales of the RBPC were used. An assessment of externalizing behavior problems in the adolescent was obtained from the Conduct Disorder (CD) scale; adolescent internalizing behavior problems were assessed by the Anxiety-Withdrawal (AW)

scale. Quay and Peterson (1987) have presented extensive reliability (e.g., mean test-retest reliability across subscales of .67, mean interrater reliability across subscales of .64) and validity (e.g., discrimination between clinic-referred and normal groups of children) data.

Procedure

The announcements used to recruit subjects instructed interested parties to phone the experimenter for more information. When contacted, the experimenter first determined whether the potential subjects were eligible, according to such criteria as the adolescent's age and the parent's marital status. After describing the project to eligible volunteers, the experimenter scheduled a data-collection session at the university for those who agreed to participate. Mothers were requested to bring to the session a copy of the adolescent's most recent report card.

At the beginning of the session, the experimenter explained the project to each mother–adolescent dyad. The subjects then were given consent forms to read and sign while the experimenter recorded the adolescent's grades from the provided report card. A release of information form was signed by the mother and the adolescent, authorizing teachers to complete the questionnaires concerning the adolescent. The dyad was then administered a series of questionnaires, presented in a random order. Only the mother's OPS and the adolescent's PDF were relevant to the purposes of the present study.

A packet of questionnaires was sent to the adolescent's father, who was requested to complete the forms and return them in an enclosed return envelope.

One year later the mothers, fathers, and adolescents were recontacted and invited to participate again; the experimental procedures were repeated with the 123 dyads who were contacted and consented to participate.

RESULTS

Means and standard deviations for each of the predictor and criterion variables, at both assessment times, are presented in Table I. One of the primary questions under investigation concerned the relationship of adolescent functioning to both parent-reported interparental conflict and adolescent perception of interparental conflict. To explore the relationships, Pearson correlations were conducted between all criterion variables (GPA, TCOG, TSOC, CD, and AW) and each of the three reports of conflict (adolescent PDF, mother OPS, father OPS). Table II presents the results of those correlations for the criterion variables at both Time 1 and Time 2. Note that

Table I. Means and Standard Deviations for All Variables

Variables[a]	*Mean*	*SD*
Predictor		
PDF	5.05	4.60
MOPS	28.77	6.20
FOPS	29.68	4.97
Criterion		
Time1		
GPA	3.10	0.79
TCOG	3.34	0.74
TSOC	3.19	0.72
CD	2.52	5.49
AW	2.47	2.95
Time 2		
GPA	3.03	0.83
TCOG	3.37	0.69
TSOC	3.23	0.73
CD	4.34	9.65
AW	2.00	2.74

[a]PDF = Personal Data Form; MOPS = mother's O'Leary-Porter Scale; FOPS = father's O'Leary-Porter Scale; TCOG = Cognitive subscale of Teacher Rating of Actual Competence; TSOC = Social subscale of Teacher Rating of Actual Competence; CD = Conduct Disorder scale of teacher-rated Revised Behavior Problem Checklist; AW = Anxiety-Withdrawal scale of teacher-rated Revised Behavior Problem Checklist.

Time 1 predictor variables (PDF, MOPS, FOPS) were correlated with the criterion variables at both assessments of adolescent functioning. At Time 1, adolescent perception of conflict (PDF) correlated significantly with GPA, TCOG, CD, and AW. At Time 2, the correlations remained significant for GPA and TCOG but not for any other of the criterion variables. Mother report of conflict (MOPS) correlated significantly with all the criterion variables at Time 1 and with GPA, TCOG, TSOC, and AW at Time 2. Father report of conflict was significantly related only to AW at Time 1 but did correlate significantly with GPA, TCOG, and TSOC at Time 2. It should also be noted that PDF was significantly correlated with MOPS ($r = .43$, $p < .01$) and FOPS ($r = .45$, $p < .01$). Furthermore, MOPS and FOPS were significantly correlated ($r = .61$, $p < .05$).

A second question was whether adolescent perception of conflict or parent report of such conflict is the more important variable in predicting functioning. To assess this issue, the correlation coefficient for PDF and each

Table II. Correlations Between Each Predictor and Criterion Variable

Time 1 predictor variables[a]	Criterion variables[a]				
	GPA	TCOG	TSOC	CD	AW
			Time 1		
PDF	−.27[d]	−.28[d]	−.15	.25[d]	.32[d]
	(174)[b]	(142)	(142)	(143)	(143)
MOPS	−.16[c]	−.23[d]	−.26[d]	.30[d]	.36[d]
	(178)	(146)	(146)	(147)	(147)
FOPS	−.15	−.10	−.10	.08	.31[d]
	(106)	(89)	(89)	(89)	(89)
			Time 2		
PDF	−.21[c]	−.24[c]	−.11	.16	.15
	(120)	(102)	(102)	(102)	(102)
MOPS	−.20[c]	−.25[d]	−.31[d]	.17	.26[d]
	(123)	(105)	(105)	(105)	(105)
FOPS	−.23[c]	−.28[c]	−.28[c]	.03	.16
	(83)	(71)	(71)	(70)	(70)

[a]TCOG = Cognitive subscale of Teacher Rating of Actual Competence (TRS); TSOC = Social subscale of Teacher Rating of Actual Competence (TRS); CD = Conduct Disorder scale of teacher-rated Revised Behavior Problem Checklist; AW = Anxiety-Withdrawal scale of teacher-rated Revised Behavior Problem Checklist; PDF = Personal Data Form, measure of adolescent perception of interparental conflict; MOPS = mother's O'Leary-Porter Scale, maternal report of interparental conflict; FOPS = father's O'Leary-Porter Scale, paternal report of interparental conflict.

[b]Numbers in parentheses indicate sample sizes.

[c]$p < .05$.

[d]$p < .01$.

criterion variable was compared with the correlation between MOPS and each criterion variable, as were the same correlations with criterion variables for PDF and FOPS. None of these comparisons was significant (all z scores < 1.9, $p > .05$).

Although adolescent perception of conflict and parental report of conflict are not significantly different in their relationship to adolescent functioning, adolescent perception of such conflict may nevertheless contribute unique variance beyond that accounted for by parental report. Multiple hierarchical regression analyses were conducted to test significant independent contributions of adolescents' perception, beyond parental report, to their own functioning. MOPS and FOPS were forced into the equations and adolescent perception of conflict was allowed to enter freely. Entering PDF last in the regression equation allowed the examination of its unique contribution once the effects of MOPS and FOPS (previously entered) were partialed out. Table III presents the results of the regression analyses at both Time 1 and Time 2. The criterion for entry of the PDF was set at .15. Therefore, only those dependent variables where PDF met this criterion are shown in

Table III. At Time 1, PDF accounted for a significant amount of variance in GPA, TCOG, and TCD. At Time 2, the contribution of Time 1 PDF accounted for a significant amount of variance in TCOG and a marginally significant amount of variance in GPA.[3]

Finally, to take into account the role that adolescent gender and age and parental marital status and SES may contribute to adolescent functioning, each of the hierarchical regression analyses was repeated with these four variables, as well as MOPS and FOPS, forced into the equations initially. In terms of the contributions of the PDF score, the results remained consistent with the analyses reported above except that GPA at Time 2 was no longer significant at a borderline level of significance.

DISCUSSION

As expected, adolescent perception of conflict correlated significantly with deficits in cognitive competence and teacher perceptions of internalizing and externalizing problems at both assessments. Consistent with previous studies (Emery, 1982), mother report of conflict also was correlated with deficits in adolescent functioning. Although father report of conflict at Time 1 correlated significantly with only one variable at Time 1, it did correlate significantly with both cognitive and social variables at Time 2. Overall, these results indicate that both adolescent perception and parent report are related to deficits in adolescent functioning. To the best of our knowledge, this is the first study that has demonstrated both a concurrent and a long-term relationship between interparental conflict and adolescent functioning.

The correlations between parental report and the criterion variables did not differ from the correlations between adolescent perception and the criterion variables. This finding suggests that the assessment of interparental conflict from either perspective is equally effective in predicting adolescent functioning. While contrary to our hypothesis, the finding does lend some support to Emery and O'Leary's (1982) conclusion that children's ratings of conflict are valid.

Although the comparison of perceived conflict and parent report of conflict did not yield results as predicted, the multiple hierarchical regres-

[3]Direct comparisons between the zero-order correlations presented in Table II and the multiple regressions reported in Table III cannot be made because of changes in sample size. Any missing data point (e.g., father data) for a subject resulted in the subject's being deleted from the regression analysis. As a consequence, the R^2 accounted for by the mother OPS and father OPS in the regression analysis may be different from the square of a zero-order correlation. For example, based on 146 subjects, the correlation between MOPS and TCOG at Time 1 was $-.23$ or 5% of the variance; yet in the regression equation, based on 87 subjects, MOPS plus FOPS accounted for only 2% of the variance.

Table III. Hierarchical Regression Analyses Examining the Unique Contribution of Adolescent Perceptions of Interparental Conflict to Adolescent Functioning

Variables[a]	Steps	F	df	R^2	Incremental R^2 when Time 1 PDF entered last
Time 1					
GPA	1. Mother and father OPS	1.13	2,102	.02	
	2. PDF	2.40	3,101	.07	.05[c]
TCOG	1. Mother and father OPS	1.08	2,85	.02	
	2. PDF	2.67	3,84	.09	.07[c]
TCD	1. Mother and Father OPS	5.49	2,85	.11	
	2. PDF	7.35	3,84	.21	.10[d]
Time 2					
GPA	1. Mother and father OPS	2.12	2,79	.05	
	2. PDF	2.15	3,78	.08	.03[b]
TCOG	1. Mother and father OPS	3.00	2,67	.08	
	2. PDF	4.06	3,66	.16	.08[c]

[a]TCOG = Cognitive subscale of Teacher's Rating of Actual Competence; CD = Conduct Disorder scale of teacher-rated Revised Behavior Problem Checklist.
[b]$p < .10$.
[c]$p < .05$.
[d]$p < .01$.

sion analyses indicated that adolescent perception contributes unique variance to deficits in functioning, primarily in the cognitive area, beyond that accounted for by parent report. Thus, although the adolescent's and the parents' perspective on interparental conflict are similarly related to adolescent functioning, the adolescent's perception contributes a unique component. Perhaps, as suggested by Cummings and Cummings (1988), adolescents' perceptions are related to their coping strategies and, subsequently, to their functioning. In contrast, actual conflict may be more related to how parents interact with their children. We would hypothesize that actual conflict, probably through disrupting parenting, is the primary mechanism of difficulty in adolescent competence. However, by examining adolescents and how they perceive, and probably cope with, the situation, a small but significant piece is added to the puzzle of understanding adolescent functioning.

It is important to note that the relationship between conflict, as assessed from the perspective of all three family members, and adolescent functioning appeared to be stronger for cognitive variables (GPA and TOG) than for the social/behavioral variables. This was particularly evident for the adolescent report of conflict since GPA and TCOG were the only two variables with significant relationship at both assessments. Furthermore, in the regression analyses, adolescent perception of interparental conflict contributed primarily to these two variables. Prior research (Simmons, Burgeson, Carlton-Ford, & Blyth, 1987) has suggested that academic performance is the area of adolescent functioning most sensitive to environmental stress. Our results provide support for this conclusion. It is our contention that academic performance represents an area in which, in contrast to social areas, teachers have relatively specific assessment measures (i.e., grades) and thus can provide an objective, well-informed evaluation of an adolescent's functioning. In addition, academic performance may be more susceptible to stress because parental conflict may disrupt parenting (Emery, 1982), which then reduces monitoring of and assistance with schoolwork. While such conflict may also influence parenting skills in social functioning, these difficulties may be more subtle and less obvious to teachers.

The father's report of interparental conflict was not significantly related to as many measures of functioning as was the mother's report, a finding that replicates data recently reported by Burman, John, and Margolin (1987). In light of the existing literature, which suggests that fathers are less involved in the family (e.g., Patterson, 1979), it is tempting to speculate that paternal report of conflict is less accurate than maternal report. This would be congruent with the Burman et al. hypothesis that fathers are less inclined than mothers to report child problems. However, as our data do not allow us to reach such a conclusion, we can only speculate at this time.

While interparental conflict has been shown consistently to be associated with disruptions in child and adolescent functioning (Emery, 1982), our un-

derstanding of the nature of this conflict is currently limited. For example, the instruments utilized in the present investigation allowed us to examine only the frequency of conflict that occurs in front of the adolescent. Other dimensions of conflict, such as intensity, chronicity, or method or resolution, have been virtually ignored in the literature. Furthermore, conflict that does not occur in front of the child has not been examined. Given the demonstrated significance of interparental conflict, future research should assess the role of these characteristics in child and adolescent functioning. On the basis of the present results, such an assessment should be conducted from the perspective of both the parent and the child or adolescent.

In summary, an adolescent's perspective on interparental conflict does contribute unique variance beyond that contributed by the parent's report. Therefore, to enhance our understanding of the role of interparental conflict in adolescent functioning, not only parent-reported but also adolescent-reported conflict should be considered in future research.

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