Assessing Marital Conflict from the Child's Perspective: The Children's Perception of Interparental Conflict Scale

John H. Grych, Michael Seid, and Frank D. Fincham

University of Illinois at Urbana-Champaign

GRYCH, JOHN H.; SEID, MICHAEL; and FINCHAM, FRANK D. *Assessing Marital Conflict from the Child's Perspective: The Children's Perception of Interparental Conflict Scale.* CHILD DEVELOPMENT, 1992, **63**, 558–572. Guided by Grych and Fincham's theoretical framework for investigating the relation between interparental conflict and child adjustment, a questionnaire was developed to assess children's views of several aspects of marital conflict. The Children's Perception of Interparental Conflict Scale (CPIC) was initially examined in a sample of 222 9–12-year-old children, and results were cross-validated in a second sample of 144 similarly aged children. 3 factor analytically derived subscales (Conflict Properties, Threat, Self-Blame) demonstrated acceptable levels of internal consistency and test-retest reliability. The validity of the Conflict Properties scale was supported by significant relations with parent reports of conflict and indices of child adjustment; the Threat and Self-Blame scales correlated with children's responses to specific conflict vignettes. The CPIC thus appears to be a promising instrument for assessing perceived marital conflict, and several issues regarding its interpretation are discussed.

Numerous studies document an association between marital conflict and child adjustment in both intact and divorced families (for reviews see Amato & Keith, 1991; Grych & Fincham, 1990). However, progress in understanding the specific nature of this association has been slow, a circumstance that is attributable in part to the limited attention paid to the construct of marital conflict and its assessment. Specifically, the multidimensional nature of conflict is rarely acknowledged, and measures of marital conflict fail to distinguish among different forms or dimensions of conflict (Fincham & Bradbury, in press). In addition, children's exposure to conflict is usually assessed via parent reports, which may not provide accurate estimates of children's awareness of conflict. The present paper therefore introduces the Children's Perception of Interparental Conflict Scale, a measure that assesses multiple dimensions of marital conflict and is derived from a theoretical framework for investigating the relation between conflict and adjustment.

Grych and Fincham (1990) recently offered a framework that outlines characteristics of marital conflict hypothesized to shape its impact on children. The framework proposes that marital conflict that is hostile or aggressive, poorly resolved, and concerns the child represents a destructive form of conflict that is particularly salient and upsetting for children. Research on children's immediate responses to conflict documents the adverse effects of anger (Cummings, Zahn-Waxler, & Radke-Yarrow, 1981), incomplete resolution (Cummings, Ballard, El-Sheikh, & Lake, 1991; Cummings, Vogel, Cummings, & El-Sheikh, 1989), and child-related content (Grych, Seid, & Fincham, 1991) on children's responses to specific episodes of conflict, but less is known about how these dimensions relate to adjustment problems. Although several studies have shown that higher levels of verbal and physical aggression are related to greater child problems (e.g., Fantuzzo et al., 1991; Jouriles, Murphy, & O'Leary, 1989), other characteristics of conflict have received less attention, and

John Grych was supported in this research by a National Research Service Award from the National Institute of Mental Health. Frank Fincham was supported by grants from the Harry Frank Guggenheim Foundation and National Institute of Mental Health (MH 44078) and by a Faculty Scholar Award from the W. T. Grant Foundation. John Grych is now at the Department of Psychiatry, B6/210 Clinical Sciences Center, University of Wisconsin, Madison, WI 53792. Address correspondence and reprint requests to Frank Fincham, Department of Psychology, University of Illinois, 603 E. Daniel St., Champaign, IL 61820.

[*Child Development*, 1992, **63**, 558–572. 0009-3920/92/6303-0008$01.00].

multiple dimensions rarely have been assessed in the same study.

Because exposure to intense, poorly resolved, child-related marital conflict is likely to represent a significant stressor for children, the framework proposes that the frequency of this type of conflict is likely to be most highly associated with child problems. In contrast, conflict that is effectively resolved with little expression of anger or aggression and does not directly concern the child is not expected to lead to child adjustment problems. This type of conflict can be viewed as constructive because it represents an adaptive way to resolve the disagreements that inevitably arise in life. In sum, the framework suggests that assessment of the *nature* of conflict and not simply its frequency is critical for understanding its relation to behavioral and emotional problems.

However, the most commonly used measures of marital conflict do not distinguish among different forms or dimensions of conflict. For example, even though the O'Leary Porter Scale (Porter & O'Leary, 1980) includes single items assessing verbal and physical aggression and covers different topics of conflict, it offers a global score that reflects the overall frequency of conflict without providing information about the type of conflict that occurs. Forehand and McCombs (1989) recently developed a parent-report measure of conflict that attempts to assess frequency, intensity, content, and whether conflict occurs in front of children, but its psychometric properties are questionable and it has not yet demonstrated its utility.

A second fundamental proposition of Grych and Fincham's (1990) framework is that children's perceptions and understanding of conflict are critical for understanding its impact on them. This position is consistent with stress and coping theorists who emphasize the mediating role of individuals' interpretation of stressful events (e.g., Compas, 1987; Lazarus & Folkman, 1984; Rutter, 1983) and with findings suggesting that openly expressed conflict is more closely associated with child problems than covert conflict or marital dissatisfaction (Emery & O'Leary, 1984; Hetherington, Cox, & Cox, 1982; Jenkins & Smith, in press; Rutter et al., 1974).

It is proposed that when children become aware of conflict they make various appraisals that shape its meaning for them. Our use of the term appraisal is consistent with its use by Lazarus and Folkman (1984), but expands their conceptualization by elaborating the types of cognitions that may occur when children witness conflict and positing both affective and cognitive elements of appraisal. Appraisals that are particularly relevant for influencing the impact of conflict on children are perceived threat, coping efficacy, causal attributions, and ascription of blame. Children may be threatened by marital conflict for a number of reasons. For example, they may fear that disagreements will escalate into aggression between parents, that they will be drawn into the conflict, or that conflict will lead to separation and divorce. Beliefs in their ability to cope with the conflict, or efficacy expectations (Bandura, 1982; Compas, 1987), are also important. If expectations are high, children are likely to feel hopeful and to engage in effective coping behaviors, whereas low efficacy expectations may result in helplessness and coping efforts may be diminished. Perceiving the cause of the conflict as stable is likely to lead to the expectation of continued interparental conflict, which could result in sadness, anxiety, anger, or feelings of hopelessness. Finally, children who blame themselves for marital conflict may experience greater shame and distress and may be more likely to try to intervene in the conflict.

The framework discusses these appraisals in regard to children's responses to specific episodes of conflict, but it is possible that consistently making certain types of appraisals may lead to adjustment problems. For example, children who feel very threatened and unable to cope when marital conflict occurs may develop anxiety if conflict is frequent. Children who tend to blame themselves could experience deficits in self-esteem or symptoms of depression. Thus, appraisals may not only influence children's immediate responses to conflict, they may contribute to the development of emotional or behavior problems.

Most studies use parent reports to assess children's exposure to conflict. However, parent reports can provide underestimates because children may be aware of conflict to which they are not directly exposed. For example, parents may not realize that their children overhear disagreements that take place in another room or after they have gone to bed. Parent reports also can overestimate children's awareness of conflict because parents may define some interactions as conflictual that are not salient to children, such as disagreements that are resolved

quickly and calmly. Consequently, measures that directly assess children's perceptions of conflict are likely to provide more accurate estimates of their exposure to conflict. Although the only published child-report measure of marital conflict (Personal Data Form; Emery & O'Leary, 1982) has adequate psychometric properties, it assesses only the frequency of conflict and thus does not capture the nature of the conflict that occurs between parents.

In sum, it is proposed that optimal assessment of marital conflict in research examining its relation to child adjustment is provided by child reports of several conflict dimensions (frequency, intensity, resolution, and content) and appraisals of conflict (perceived threat, coping efficacy, self-blame, and causal stability). Because no existing measures of conflict assess multiple aspects of conflict from the child's viewpoint, we developed the Children's Perception of the Interparental Conflict Scale (CPIC). The present study investigates the reliability and factor structure of the CPIC in two independent samples of elementary school children. It also examines its validity by assessing relations with parent reports of conflict, indices of child adjustment, and children's responses to specific conflict vignettes.

Method

Research Participants and Procedure

The CPIC was first tested on a sample of 222 (124 boys, 98 girls) fourth- and fifth-grade children (M = 129 months, SD = 15.6 months). To replicate initial findings, a second sample of 114 (52 boys, 62 girls) fifth graders (M = 131 months, SD = 6.85 months) was later recruited. The children in both samples were predominantly white and comprised all children in the fourth- and fifth-grade classes at three schools who received parental consent to participate in our research (approximately 85% of children). Children were asked to indicate whether they lived with two parents (either biological or stepparents), one parent, or neither parent. Those living with one or neither parent were instructed to complete the CPIC by referring to disagreements that occur between their parents when they are together or by recalling past disagreements. Consequently, whether these children are referring to past or current conflict between separated or divorced parents is unknown, and therefore only data from children indicating that they lived with two parents (84% of the sample) were used to assess the psychometric properties of the CPIC.

Children completed the CPIC, measures of adjustment, and peer behavior nominations in their classrooms during the regular school day. In addition, teachers completed brief behavior checklists for the children taking part in the study, and each teacher received a $5.00 honorarium for doing so.

Questionnaire packets that included measures of marital conflict and child behavior were sent to parents of the children in the first sample. These questionnaires were included as part of a larger study, and parents received $20.00 for their participation in the study. Forty-six percent of the parents (97 couples) returned packets completed by both parents. The average income of the parents was in the $35,000–$40,000 range. The average age of mothers was 37 years (SD = 4.5) and they averaged 14.6 years of education (SD = 2.5). The corresponding figures for fathers are 38.3 years of age (SD = 4.7) and 14.9 years of education (SD = 2.9). The large majority (80% of mothers, 83% of fathers) were in their first marriage. These couples averaged 16.4 years (SD = 3.7) of marriage and 2.7 children (SD = .99). Couples in which one spouse had been married previously were married an average of 10.7 years (SD = 4.5) and had 2.6 (SD = 1.03) children. No parent had more than one previous marriage.

Finally, 2–3 months after completing the CPIC at their school, a subset of children (n = 45) from the first sample participated in individual testing sessions during which they listened to audiotapes of two actors engaged in conflict. Children were told that the actors were a married couple who had a child their age, and were instructed to imagine that the disagreements were taking place between their own parents. After each vignette, children responded to a number of questions regarding what they would think and how they would feel if the conflict occurred in their own home.

Measures

Marital Conflict

Children's Perception of Interparental Conflict.—The Children's Perception of Interparental Conflict Scale (CPIC) initially included four subscales describing dimensions of marital conflict (frequency, intensity, resolution, and content) and four scales

describing children's reaction to or interpretation of conflict (self-blame, threat, coping efficacy, and perceived stability of the causes of conflicts). In addition, two other factors that may be important for understanding the stressfulness of conflict for children, its predictability, and the likelihood of it involving the child (labeled "triangulation") were constructed.

The development of the CPIC followed several steps. First, a list of items was generated to represent each dimension. Several items for the Frequency subscale were taken from Emery and O'Leary's (1982) Personal Data Form, and the remaining items were created for this measure. Eight to 10 statements were generated for each of the 10 dimensions, resulting in a pool of approximately 90 items. These items were then examined by the authors, and those that best captured the meaning of each dimension (70 items) were retained. Children respond to each statement on the CPIC by circling either "True," "Sort of True," or "False." On each dimension, higher scores reflect increasingly negative forms of conflict or appraisal (e.g., higher scores on the resolution scale represent poorer resolution and higher scores on the blame scale reflect greater self-blame).

This measure was piloted on an independent group of 44 fourth and fifth graders. Although too small to examine the psychometric properties of the scale, this sample provided initial data on correlations among the items. The Predictability subscale was eliminated because the items comprising this scale were not strongly related to each other. For the remaining questions, items proposed to reflect the same dimension were significantly related and were not highly associated with items tapping other dimensions. However, several items with low correlations were dropped or rewritten to more clearly reflect the dimension they were designed to assess. The resulting version of the CPIC consisted of 51 items on nine subscales (see Appendix for items).

O'Leary-Porter Scale (OPS; Porter & O'Leary, 1980).—The OPS assesses parents' perceptions of the frequency with which marital conflict occurs in front of the target child. It includes items assessing how often verbal and physical aggression occur and how often parents argue over topics such as discipline and spouses' personal habits. One item assesses the frequency with which parents express affection toward each other and is reverse keyed. Items on the scale are summed and high scores represent greater overt marital conflict. The 10-item OPS has demonstrated good internal consistency (alpha = .86) and test-retest reliability over 2 weeks (r = .96; Porter & O'Leary, 1980). In the present sample, husbands' and wives' scores on the OPS were significantly correlated (r = .54), and so their ratings were combined.

Conflict Tactics Scale (CTS; Straus, 1979).—The CTS is an 18-item measure of verbal and physical aggression between spouses. Spouses rate how often they and their partner have engaged in various behaviors during disagreements in the past 6 months. The list of behaviors includes examples of nonaggressive resolution (e.g., "discussed the issue calmly"), verbal aggression ("insulted or swore at the other"), and physical aggression ("pushed, grabbed, or shoved the other"). The CTS has been widely used to study aggression in marital conflict and has demonstrated adequate psychometric properties (Straus, 1979). Parent ratings on the CTS were highly associated (r = .86) in this study and so were combined to provide a global measure of interparental aggression.

Conflict vignettes.—Each child who participated in individual testing sessions heard four disagreements on audiotape that varied in their intensity and content (child vs. nonchild related). Children indicated how distressed, helpless, and ashamed they would feel if each conflict occurred in their home by marking scales anchored on either side by the words "Not at all" and "Very much." Distress was a composite variable formed by combining children's ratings of "mad," "sad," and "worried" as initial analyses suggested that children's ratings of these items represent a general negative affective response rather than distinct qualities of emotion.

Perceived threat was assessed by inquiring about two types of beliefs: that the conflict would escalate, and that the child would be drawn into the conflict. Children responded to each statement by checking "strongly disagree," "disagree," "agree," or "strongly agree." The four items on the Escalation scale demonstrated an alpha of .86. A sample item from this scale is "the disagreement will get worse." Three items comprised the Child Involvement Scale, which also exhibited an acceptable level of internal consistency (alpha = .73). An item

from this scale is "I probably would get yelled at."

Children also rated the degree to which the child was to blame for the conflict by marking a line anchored by "not the child's fault" and "mostly the child's fault." Coping efficacy was assessed with two items. After asking children how they would respond if each conflict occurred between their parents, they rated the extent to which their response would "help make you feel better" (emotion-focused coping) and "help the parents end their disagreement" (problem-focused coping). Children responded to the coping efficacy items by marking a straight line as above.

Marital Satisfaction

Marital Adjustment Test (MAT; Locke & Wallace, 1959).—The MAT is a widely used measure of marital satisfaction that includes 15 items assessing various aspects of marriage. Its psychometric properties are well established, and it has been shown to discriminate between nondistressed couples and those experiencing marital problems (Locke & Wallace, 1959). As with the OPS and CTS, husbands' and wives' scores were correlated (r = .54) and a single score representing marital satisfaction therefore was formed.

Child Adjustment

In investigating relations between the CPIC and adjustment we obtained ratings of child functioning from several sources. Many studies of the link between conflict and adjustment have used only a single rater (usually the child's mother) to assess the association between the two constructs. When the same individual rates both conflict and adjustment, the correlation between them may be inflated due to method variance. Therefore, we obtained ratings of child adjustment from parents, the children's teacher and classmates, and the children themselves. Including multiple raters also provides a much broader perspective on children's functioning than can be obtained from a single individual.

Two broad classes of behavior problems, internalizing and externalizing, were assessed. Outside observers (e.g., parents) tend to be more accurate judges of externalizing than of internalizing problems (Achenbach, McConoughy, & Howell, 1987), whereas children are likely to provide the best assessment of internalizing problems. Therefore, externalizing behavior was assessed via parent, teacher, and peer reports. Internalizing behavior was assessed by these raters as well as the children themselves. The questionnaires used to measure children's adjustment are listed below.

Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983).—Parents completed two subscales from the CBCL, a well-validated and widely used measure of child behavior problems. The Aggression and Depression subscales were included in the present study because they were viewed as most representative of externalizing and internalizing problems, respectively. On each scale parents indicate the extent to which their child exhibits a series of problem behaviors. The Aggression subscale includes items such as "gets in many fights" and the Depression subscale includes items such as "feels worthless or inferior." Because husbands' and wives' ratings on these scales correlated significantly (aggression, r = .64; depression, r = .50), their ratings were combined. Both scales demonstrated adequate reliability in this sample (Aggression: alpha = .92, .95; Depression: alpha = .81, .91, for boys and girls, respectively).

Children's Depression Inventory (CDI; Kovacs, 1981).—The CDI is a 27-item self-report measure of depression that was developed as a downward extension of the Beck Depression Inventory. For the present study, one item concerning suicidal thoughts was omitted after consultation with the school principals. Each item on the CDI consists of a set of three statements describing a symptom of depression. Responses are scored from 0 to 2, with larger numbers indicating more severe expression of a symptom. The CDI demonstrates high internal consistency in normal samples (alpha = .94; Saylor, Finch, Spirito, & Bennett, 1984) but correlates highly with self-report measures of other types of internalizing problems (e.g., anxiety). Consequently, it may best be viewed as an index of dysphoria or emotional distress.

Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978).—The RCMAS is an updated version of the Children's Manifest Anxiety Scale, which includes 27 items assessing trait anxiety (Casteneda, McCandless, & Palermo, 1956). Children respond to each item by circling either "yes" or "no," depending on whether the statement describes them. The RCMAS has demonstrated adequate internal consistency (alpha = .83; Reynolds & Rich-

mond, 1978) and concurrent and construct validity (Reynolds, 1980; Reynolds & Richmond, 1979). As expected, children's ratings of anxiety on the RCMAS were highly correlated with their scores on the CDI (boys, $r = .70$; girls, $r = .75$) and so scores on each measure were standardized and summed to form a global index of internalizing problems.

Children's behavior in school.—Children's behavior in school was assessed with teacher ratings and peer behavior nominations. Teachers completed a 10-item checklist that assessed the frequency with which children exhibited a variety of behaviors. Behaviors were rated on seven-point scales ranging from "Almost Always" to "Never" and included representative examples of externalizing (e.g., "starts fights," "bullies other children") and internalizing ("is timid and hangs back," "is nervous") behavior. Peer behavior nominations were used to assess a similar set of behaviors. Children in each class indicated which of their classmates tended to engage in behaviors such as "who starts fights" (externalizing) and "who is timid and hangs back" (internalizing). Both teacher and peer ratings were standardized within classrooms.

In order to form more succinct measures of children's behavior in the school context, principal components analyses were performed on the teacher-rated and peer-rated items to determine if these items could be adequately represented by a smaller number of dimensions. Two principal components with eigenvalues greater than 1.0 were extracted that together accounted for 61.2% of the variance in boys' scores and 60% of girls' scores. Most of the items loaded on these two components, which are clearly identifiable as internalizing and externalizing problems. The items on each dimension were unit-weighted and then summed to create composite variables. Each item included on the composite scale loaded at least .50 on its respective component and loaded less than .30 on the other component. The eight-item externalizing composite, which included teacher and peer ratings of behavior such as "starts fights" and "is bossy," demonstrated high internal consistency (for boys, alpha = .90; for girls, alpha = .89). As is typically the case, internalizing behaviors were more difficult to measure reliably. The internalizing composite, which consisted of peer and teacher ratings of "is timid and hangs back" and teacher ratings of "is nervous" and "seems unhappy or sad" (included only on boys' composite), demonstrated a lower level of internal consistency (alpha = .65 and .69 for boys and girls, respectively). Support for the concurrent validity of these measures was provided by correlations between the externalizing composite and parents' ratings of aggression on the CBCL (for boys, $r = .49$; for girls, $r = .31$) and between the internalizing composite and parents' ratings of depression on the CBCL ($r = .38, .49$, for boys and girls, respectively). These correlations are comparable to those generally found between teacher and parent ratings of child behavior (see Achenbach et al., 1987).

Results

We first present data concerning the reliability and intercorrelation of the nine CPIC scales and then examine their factor structure. The reliability and validity of subscales formed on the basis of factor analyses will then be examined and relations between measures of conflict and adjustment presented.

Analyses of Initial Scales

The internal consistency of each of the nine initial scales was assessed by computing coefficient alpha. Because of low item-total correlations, one item was dropped from each of three scales (Triangulation, Stability, and Content). As Table 1 shows, most of the scales demonstrated an acceptable level of internal consistency, a finding that was replicated in the second sample. Thus, the items designed to reflect a common dimension appear to hang together across samples.

Table 2 lists the correlations among the CPIC scales. As expected, the scales were associated with each other, and some scales (e.g., Frequency and Intensity) were fairly highly correlated. High intercorrelations between scales may indicate that they do not represent distinct dimensions or that certain dimensions reflect common underlying constructs. To examine the possibility that the scales could be adequately represented by a smaller number of dimensions, the data were examined with factor analysis.

Factor Analyses

The scales representing each dimension were used as the variables in the factor analysis because they appear to provide reliable measures of the dimensions and because the sample size is not large enough to provide adequate estimation if individual items are used (see Nunnally, 1978). The factor analysis conducted on the first sample was explor-

TABLE 1

INTERNAL CONSISTENCY (Coefficient Alpha) OF CPIC SCALES

	Sample 1	Sample 2
Intensity	.82	.80
Frequency	.70	.68
Resolution	.83	.82
Threat	.82	.83
Coping Efficacy	.69	.65
Blame	.61	.69
Content	.74	.82
Stability	.65	.64
Triangulation	.71	.62

atory, as no hypotheses were advanced concerning the number of factors that might underlie the scale. Confirmatory factor analysis then was used for the second sample in an attempt to cross-validate the solution obtained from the first sample. For each analysis, factors were extracted using the generalized least squares (GLS) method. Like maximum likelihood estimation, GLS provides a significance test for the fit of the factor solution, but in contrast to maximum likelihood it does not require the stringent assumption that the data have a multivariate normal distribution. After factor extraction, an oblique rotation (Oblimin) was used because it is likely that factors representing different aspects of marital conflict are related.

Decisions regarding the number of factors to extract from a factor analysis are guided by theoretical as well as statistical considerations; in fact, given the absence of definitive statistical criteria for model selection, the theoretical meaning of the factors plays a predominant role in determining the "best" solution (see Johnson & Wichern, 1988; Muller & Kim, 1978). In the present case, χ^2 goodness-of-fit tests did not provide a basis for deciding how many factors to retain. One [$\chi^2(27) = 109.37$, $p < .001$], two [$\chi^2(19) = 60.50$, $p < .001$], and three [$\chi^2(12) = 27.37$, $p < .01$] factor solutions provided an increasingly better fit to the data, but none were accepted at conventional levels of significance. However, other criteria indicate that a three-factor model provides the most satisfactory solution.

Extraction of three factors resulted in retention of a factor with an eigenvalue slightly lower than 1.0, but this solution accounted for a greater percentage of variance and was conceptually more meaningful than one- or two-factor solutions. A primary goal of this study is to distinguish between various aspects of conflict, and the three-factor solution separates description of the characteristics of conflict (e.g., intensity) from children's appraisals (e.g., perceived threat). In contrast, the two-factor solution placed all variables except Content and Blame on a single factor, the interpretation of which is less clear. The factor pattern matrix from the three-factor model is presented in Table 3. Variables were retained on a factor if their weights on the factor were at least .30.

A three-factor solution then was tested with confirmatory factor analysis on the second sample, and the fit of this model was compared to one- and two-factor models. These tests indicate that the three-factor model was consistent with the data [$\chi^2(12) = 19.77$, $p > .05$], whereas the one- [$\chi^2(27) = 66.17$, $p < .001$] and two-factor [$\chi^2(19) = 38.32$, $p < .01$] models again were rejected.

TABLE 2

CORRELATIONS AMONG CPIC SUBSCALES

	Freq.	Int.	Res.	Threat	Cope	Cont.	Bla.	Tri.	Stab.
Frequency		.68	.61	.44	.36	.43	.39	.45	.48
Intensity	.62		.67	.46	.43	.34	.39	.49	.50
Resolution	.58	.61		.37	.44	.40	.41	.49	.58
Threat	.41	.38	.38		.55	.24	.29	.57	.30
Coping Efficacy	.37	.41	.39	.58		.20	.24	.46	.27
Content	.40	.25	.35	.35	.28		.63	.41	.52
Self-Blame	.30	.23	.36	.30	.32	.70		.35	.36
Triangulation	.44	.38	.43	.55	.41	.56	.59		.55
Stability	.40	.18	.48	.27	.18	.38	.43	.47	

NOTE.—Sample 1 correlations are presented above the diagonal; Sample 2 correlations are printed below the diagonal.

TABLE 3

FACTOR PATTERN MATRIX FROM FACTOR ANALYSES OF CPIC

	SAMPLE 1			SAMPLE 2		
SUBSCALE	I	II	III	I	II	III
Intensity	−.09	.09	.82	.02	−.14	.91
Resolution	.01	.04	.85	−.01	.15	.70
Frequency	.07	.09	.68	.05	.10	.68
Threat	.02	.94	.12	1.03	−.02	−.07
Coping Efficacy	.04	.56	.16	.48	.06	.19
Self-Blame	.54	.09	−.13	−.04	.93	−.08
Content	1.04	−.02	.06	.03	.79	−.02
Triangulation	.16	.50	−.21	.29	.53	.09
Stability	.26	−.03	.56	−.01	.49	.16
% of variance	50.40	13.00	9.20	47.80	14.20	10.70
Eigenvalue	4.54	1.17	.83	4.30	1.27	.97
Total variance:		72.6%			72.7%	

NOTE.—Weights larger than .30 are underscored.

The factor pattern matrix from the analysis with the second sample also is presented in Table 3.

As Table 3 shows, results of the factor analyses for the two samples were very similar but not identical. Although the analyses produced three comparable factors, the variables loading on each factor were slightly different across samples. Seven of the nine subscales showed clear and consistent loadings across the two samples. In each sample, the Frequency, Intensity, and Resolution subscales loaded highly on the same factor, providing support for the proposal that these dimensions together define a destructive form of marital conflict. It was predicted that child-related content also would define destructive conflict, but content was not associated with the other dimensions. Threat and Coping Efficacy consistently loaded on the same factor, suggesting that the degree to which children feel threatened by conflict is linked to their perceived ability to cope with the conflict. The Content of conflict (child-related vs. nonchild related) loaded on the same factor as Self-Blame in both samples; thus, the tendency for children to blame themselves for marital conflict was associated with the degree to which the topic of conflict concerned them.

Two subscales, Stability and Triangulation, were not as consistent in their loadings across the two samples. In the first sample, Stability loaded on the Frequency/Intensity/Resolution factor, but in the second it loaded on the Content/Self-Blame factor. Triangulation loaded on the Threat/Coping factor in the first sample and on the Self-Blame/Content factor in the second sample. Because Stability and Triangulation did not load consistently on a particular component, they were not included in the CPIC scales derived from the factor analyses. After dropping these two dimensions, the remaining scales were refactored and the dimensions comprising the three factors did not change. The inconsistent loading of the Stability subscale may be a product of its reliability, which was the lowest among the subscales across samples. The Triangulation subscale, on the other hand, may be meaningfully associated with both Self-Blame/Content and Threat/Coping Efficacy. In future data collections these scales will be revised and reexamined in order to better understand how they relate to the other dimensions.

Analyses of Derived CPIC Scales

Three scales (labeled "Conflict Properties," "Threat," and "Self-Blame") were formed for the CPIC by unit weighting and then summing the scores on the dimensions loading on each of the three factors. Unit weights were used rather than factor scores because they are not sample specific and therefore are likely to be more robust across samples (Cohen, 1990). These scales were moderately associated, with correlations ranging from .31 to .52 across the two samples. We now turn to consider evidence pertaining to their reliability and validity.

Reliability.—The reliability of the three scales was assessed by two methods: internal consistency and test-retest. Coefficient alpha was computed, and each scale demonstrated good internal consistency across samples, with all but one value greater than .80 (coefficient alphas for Sample 1 and Sample 2, respectively, were: Conflict Properties, .90 and .89; Threat, .83 and .83; Self-Blame, .78 and .84). Thus, each scale exceeds the lower level (.70) of internal consistency recommended for research use (Nunnally, 1978). Test-retest correlations over 2 weeks obtained for a subset of children from Sample 2 (n = 44) indicate that these scales also have an acceptable level of stability (Conflict Properties = .70; Threat = .68; Self-Blame = .76).

Validity.—The validity of this measure first was examined by comparing scores on the three CPIC scales with established parent-rated measures of marital conflict (OPS; Porter & O'Leary, 1980) and interspousal aggression (Conflict Tactics Scale; Straus, 1979). Because different raters (parents vs. children) are involved, correlations between the measures were not expected to be very high. As the parent-reported measures assess the frequency and intensity of marital discord, the CPIC scale describing frequency, intensity, and resolution ("Conflict Properties") should be most strongly associated with the parent measures. This was found to be the case. This scale was significantly related to the OPS [$r(81)$ = .30] and the Conflict Tactics Scale [$r(78)$ = .39], whereas the Threat [OPS: $r(85)$ = .06; CTS: $r(83)$ = .26] and Self-Blame [OPS: $r(86)$ = .08; CTS: $r(84)$ = .10] were not consistently associated with these measures.

The validity of the subscales also was assessed by examining whether children's perceptions of conflict were related to their adjustment. Correlations were computed between the CPIC subscales and the indices of internalizing and externalizing problems obtained on the children in Sample 1. Table 4 shows that the Conflict Properties scale of the CPIC is significantly related to most of the measures of adjustment for boys and girls. As expected, greater exposure to more frequent, intense, and poorly resolved conflict was correlated with higher levels of parent and teacher/peer reported externalizing problems and with child reports of internalizing problems. This scale also is positively correlated with teacher/peer ratings of internalizing behavior for boys, but negatively correlated with these reports for girls. Children's perceptions of conflict were not

TABLE 4

CORRELATIONS BETWEEN MEASURES OF MARITAL CONFLICT AND CHILD ADJUSTMENT

	Properties	Threat	Self-Blame	OPS	MAT	CTS
Boys:						
Externalizing:						
CBCL-AGR	.30*	.19	.17	.03	−.10	.17
SCHL-EXT	.20*	.04	.16^{+}	−.14	.30*	.04
Internalizing:						
CBCL-DEP	.10	.18	.10	.39*	−.22^{+}	.25^{+}
CDI-ANX	.49*	.50*	.57*	.09	.07	.11
SCHL-INT	.18*	.13^{+}	.17*	.12	−.19	.25*
Girls:						
Externalizing:						
CBCL-AGR	.26*	.15	.03	.32*	−.16	.34*
SCHL-EXT	.27*	.13	.06	.20^{+}	−.28*	.32*
Internalizing:						
CBCL-DEP	.16	.08	.11	.08	.01	.04
CDI-ANX	.31*	.41*	.32*	.01	.13	.10
SCHL-INT	−.23*	.07	.04	.04	.09	−.20^{+}

NOTE.—CBCL-AGR = Aggression subscale from Child Behavior Checklist, CBCL-DEP = Depression subscale from Child Behavior Checklist, SCHL-EXT = teacher/peer report of externalizing behavior, SCHL-INT = teacher/peer report of internalizing behavior, CDI-ANX = child report of internalizing problems.

$^{+}$ $p < .10$.

* $p < .05$.

correlated with parents' reports of depression on the CBCL.

Relations between adjustment and parent reports of conflict and marital satisfaction also were assessed in order to compare these measures with the CPIC. Table 4 indicates that child perceptions of frequent, intense, and poorly resolved conflict were significantly related to more measures of child adjustment than parent reports of conflict or marital satisfaction. Whereas the Conflict Properties scale of the CPIC was significantly correlated with four of five adjustment measures for boys and for girls, the OPS and MAT each correlated significantly with only one of five indices for each gender and the CTS correlated with a total of three measures. Parent reports of greater overt conflict were significantly correlated with parent reports of internalizing problems in boys and externalizing problems in girls, and higher marital satisfaction was associated with teacher/peer reports of *greater* externalizing behavior in boys and less externalizing behavior for girls. Finally, parent reports of greater aggression were significantly related to teacher/peer reports of greater internalizing problems in boys and both parent and teacher/peer reports of greater externalizing problems in girls.

The Threat and Self-Blame subscales of the CPIC were not as consistently related to adjustment indices as ratings of the conflict dimensions. Both boys' and girls' rating of the degree to which they felt threatened by and unable to cope effectively with conflict were significantly associated with self-report of greater internalizing problems. Children's ratings of the degree to which the topic of marital conflict concerned them and to which they blamed themselves for conflict were associated with higher scores on self reports of internalizing problems for both boys and girls and on teacher/peer reports of internalizing problems for boys.

The finding that children's ratings of Threat and Self-Blame consistently predicted only child reports of internalizing problems raises the question of whether these associations are due to method variance. In other words, rather than reflecting a meaningful relation between appraisals and internalizing problems, the associations could arise because a single rater was used to assess each variable. To examine this question, regression analyses were conducted in which the three CPIC scales were used to predict children's reports of internalizing problems. If the correlations are due to method variance, the individual CPIC scales would not be expected to contribute uniquely to the prediction of internalizing problems.

These regressions showed that the three CPIC scales accounted for 43% of the variance in boys' scores ($p < .01$) and 21% of the variance in girls' scores ($p < .01$). More important, after controlling for the other scales, both Threat (boys: $t = 3.10$, $p < .01$; girls: $t = 2.66$, $p < .01$) and Blame (boys: $t = 4.16$, $p < .01$; girls: $t = 2.08$, $p < .05$) accounted for unique variance in boys' and girls' reports of internalizing problems. In contrast, children's descriptions of the frequency, intensity, and resolution of conflict did not significantly predict internalizing problems (boys: $t = 1.20$, $p > .05$; girls: $t = .66$, $p > .05$) after controlling for children's appraisals of Threat and Blame. These analyses suggest that the relations of internalizing problems with Threat and Blame do not simply reflect method variance.

Finally, validity also was assessed by examining relations between children's scores on the three CPIC scales and their responses to taped vignettes of marital conflict. The validity of the CPIC would be supported by (*a*) significant correlations between the Threat scale and children's report of negative affect, threat, and coping efficacy in response to the vignettes and (*b*) a significant association between the Self-Blame scale and children's rating of the degree to which the child is seen as at fault for the conflicts. As responses to individual disagreements are not as relevant for establishing the validity of the Conflict Properties scale, no predictions were made concerning this scale.

Children's responses to the conflict vignettes were summed across the four disagreements, and correlations then were computed between each response and the three CPIC scales. As predicted, higher scores on the CPIC threat scale were significantly related with greater helplessness [$r(44) = .38$, $p < .05$], greater fear of child involvement in the conflict [$r(44) = .29$, $p < .05$], and with lower confidence that children could help the parents resolve the conflict [$r(44) = -.30$, $p < .05$] or help themselves feel better [$r(44) = -.30$, $p < .05$].

Correlations with shame [$r(44) = .25$], fear of escalation [$r(44) = .22$], and child fault [$r(44) = .25$] were marginally significant ($p < .10$). The CPIC Self-Blame scale correlated significantly with the degree to which the child was perceived as at fault for the conflict vignettes [$r(44) = .32$, $p < .05$]. Finally, scores on the Conflict Properties scale were not significantly correlated with any of the responses to the vignettes but were marginally associated with ratings of child fault [$r(44) = .25$, $p < .10$].

Discussion

Development of the Children's Perception of Interparental Conflict Scale was guided by Grych and Fincham's (1990) cognitive-contextual framework, which proposes that certain dimensions of conflict (frequency, intensity, and resolution) are most closely related to child adjustment problems. The framework also emphasizes the importance of children's perceptions and interpretations of conflict in understanding its relation with child adjustment. By assessing several characteristics of conflict from the child's perspective, the CPIC addresses limitations of prior measures of marital conflict.

Three scales were derived for the CPIC through factor analysis. High scores on the first scale reflect conflict that occurs often, involves higher levels of hostility and aggression, and is poorly resolved. The second scale indicates the degree to which children feel threatened and able to cope when marital conflict occurs. The third scale assesses the frequency of child-related conflict and the degree to which children blame themselves for marital conflict. The internal consistency of each scale was well above that recommended for research instruments, and test-retest correlations indicated that scale scores were reasonably stable over 2 weeks. The validity of the Conflict Properties scale was supported by significant correlations with parent-reported measures of marital conflict and interparental aggression. Evidence of the validity of the Threat and Self-Blame scales was provided by significant, theoretically predicted associations with children's responses to several conflict vignettes assessed 2–3 months later.

Perhaps most important, significant relations were found between child perceptions of conflict and their adjustment: children reporting higher levels of frequent, intense, and poorly resolved conflict between their parents evidenced higher levels of both internalizing and externalizing problems. It is particularly notable that significant relations with the CPIC were found across raters of adjustment. Previous research using parents to rate both conflict and adjustment may have produced inflated estimates of the association between the variables due to method variance. The present results involving the OPS reflect this possibility, as parent reports of conflict correlated significantly only with parent ratings of adjustment. However, the child reports of conflict were significantly related to judgments of adjustment by parents, teachers, and peers, providing greater confidence in the robustness of the relation between children's perceptions of conflict and adjustment problems. Although most of the differences between the correlations generated by the *child*-report CPIC and *parent*-report OPS were not significantly different, the CPIC was a more consistent predictor of children's adjustment. The importance of a viable tool for assessing children's perceptions is emphasized by the need to study the child's perspective in order to gain a more complete understanding of the association between marital conflict and child adjustment.

It also is noteworthy that the same general pattern of results was found for boys and girls. This finding is consistent with research showing that, in contrast to research on marital satisfaction, sex differences are not apparent in the relation between overt marital conflict and child adjustment. The only difference in the pattern of correlations for boys and girls is that higher levels of conflict were related to teacher/peer reports of greater internalizing problems in boys but lower levels of internalizing problems in girls.

In contrast to their description of characteristics of parental conflict, children's reports of threat and self-blame were not strongly related to adjustment. The only exception to this pattern was a positive association between appraisals of threat and blame and children's self-report of internalizing problems. Consistent with Grych and Fincham's (1990) cognitive-contextual framework, this finding suggests that children who feel threatened and unable to cope with conflict and blame themselves for its occurrence may be likely to exhibit problems such as anxiety and depression. If appraisals of threat and blame mediate the association between exposure to conflict and internalizing problems, then it would be expected that the relation between the Conflict Properties scale and child reports of internalizing problems would decrease significantly once the Threat and Self-Blame scales were entered

into the equation, while Threat and Self-Blame remain significantly associated with internalizing problems (see Baron & Kenny, 1986). Results of regression analyses on boys' and girls' reports of internalizing problems support a mediational model in that Conflict Properties did not significantly predict internalizing problems once Threat and Self-Blame were controlled, but the Threat and Self-Blame scales each significantly predicted child internalizing problems after accounting for the effects of the other two scales. This suggests that the relation between marital conflict and internalizing problems depends on the degree to which children feel threatened and blame themselves when conflict occurs, rather than exposure to conflict per se.

A number of issues arise regarding the interpretation of the CPIC. The first is that the significant relation between internalizing problems and the Threat and Self-Blame scales may be due to method variance. The finding that neither parent nor teacher/peer measures of internalizing problems were consistently related to these appraisals supports this possibility. However, as outside observers, parents, teachers, and peers are likely to be poorer raters of internalizing problems than of externalizing behaviors, particularly when these problems are at a subclinical level. With the possible exception of clinical interviews, children's self-report of depression and anxiety is likely to be the most valid measure of internalizing problems. Further, the regression analyses showing that Threat and Blame, but not Conflict Properties, uniquely predicted internalizing problems casts some doubt on this explanation. It still could be argued that these findings are due to similarity in the content of the conflict and internalizing measures (i.e., children who endorse items representing greater threat and self-blame in the context of marital conflict may also endorse items reflecting greater anxiety and self-denigration on general measures of anxiety and depression). Unfortunately, the present data cannot be used to distinguish between these alternatives. In future studies, clinical interviews or child reports of both externalizing and internalizing problems should be obtained to examine whether their appraisals predict both self-report measures of adjustment or only internalizing problems.

A second issue is whether children are able to provide valid descriptions of conflict that are distinct from their subjective response to the conflict. For example, children who feel very threatened when their parents fight may report that conflict is also very frequent, intense, poorly resolved, and so on, regardless of its actual properties. Several pieces of evidence suggest that the CPIC does not simply measure a general response to interparental conflict. First, factor analyses indicate that a one-factor solution does not fit the data and that a three-factor solution is preferable. Second, when three subscales are formed by summing the dimensions loading on each factor, the correlations between these subscales are not so high as to suggest that the scales are measuring the same construct (r's ranged from .31 to .52). Third, differential relations between the CPIC subscales and outcome measures (e.g., a stronger relation of adjustment with Conflict Properties than with Threat) suggest that the scales are measuring somewhat different phenomena. Consequently, it seems unlikely that the three CPIC subscales are redundant, and so combining all of the items into a single scale is likely to blur important distinctions between them.

A third, related issue regarding the CPIC concerns the most meaningful way to organize the various dimensions. If the CPIC is not measuring a single factor, how many scales should be used to represent children's perceptions of conflict? One solution is to keep the nine dimensions separate, as they were intended to tap conceptually distinct phenomena. The potential problem with this approach is that dimensions that are strongly related may reflect the same construct and by analyzing each separately there is a risk of repeating the same basic finding and drawing misleading conclusions about each dimension. Although there may be some circumstances in which a particular dimension is of special interest and is investigated separately, the results of factor analyses on both samples indicate that the dimensions can be meaningfully summarized with three subscales.

A final issue to consider is whether dimensions that are strongly associated are related because children cannot distinguish between them or because the phenomena captured by the dimensions actually covary. A salient example of this issue is the high correlation among ratings of frequency, intensity, and resolution. Although the data collected from the children do not indicate whether they distinguish between these dimensions, data collected from parents are relevant to this issue. As an adjunct to the study, parents completed questionnaires assessing the frequency, intensity, and reso-

lution of marital conflict. Like the child ratings, parent ratings of these dimensions were significantly correlated (*r*'s ranged from .46 to .57), suggesting that these dimensions of conflict tend to be related. That is, couples who engage in more aggressive or hostile conflict also tend to be poorer at resolving disagreements and have them more frequently. Whether other highly related dimensions on the CPIC are not distinguished by children or are distinguished but actually covary cannot be addressed with the present data.

The data reported above were obtained with 10–12-year-old children from two-parent families, and generalizability to other populations should not be assumed. The language on the CPIC makes it appropriate for use with children from third grade through junior high school, but children's perceptions and interpretations of marital conflict are likely to change with age, and consequently the reliability, validity, and factor structure of the CPIC may differ across developmental levels. The CPIC also can be used with children from separated or divorced families, but in this case the referent for the questions (i.e., current or past conflict) should be made explicit in the instructions.

In sum, the CPIC appears to provide reliable and valid assessment of children's perceptions and interpretations of conflict and offers some advantages over existing measures of overt marital conflict. It assesses particular dimensions of marital conflict proposed to lead to child adjustment problems and obtains children's perspective on the degree of conflict to which they are exposed. It may be particularly valuable for use in studies in which only parent ratings of child adjustment are obtained because employing parent reports of conflict may inflate the relation between conflict and adjustment. The utility of the CPIC ultimately will be decided by its ability to account for variance in child adjustment, but at present it appears to be a promising measure of children's exposure to conflict.

Appendix

Family Disagreements

I live with ____ both my mom and my dad
____ only one of my parents
____ another relative (e.g., grandmother, aunt)

In every family there are times when the parents don't get along. When their parents argue or disagree, kids can feel a lot of different ways. We would like to know what kind of feelings *you* have when *your* parents have arguments or disagreements.

If your parents don't live together in the same house with you, think about times that they are together when they don't agree or about times when both of your parents lived in the same house, when you answer these questions.

T = True
ST = Sort of True
F = False

Frequency
1.* I never see my parents arguing or disagreeing
10. They may not think I know it, but my parents argue or disagree a lot
16. My parents are often mean to each other even when I'm around
20. I often see my parents arguing
29.* My parents hardly ever argue
37. My parents often nag and complain about each other around the house

Intensity
5. My parents get really mad when they argue
14.* When my parents have a disagreement they discuss it quietly
24. When my parents have an argument they say mean things to each other
33. When my parents have an argument they yell a lot
38.* My parents hardly ever yell when they have a disagreement
40. My parents have broken or thrown things during an argument
45. My parents have pushed or shoved each other during an argument

Resolution
2.* When my parents have an argument they usually work it out
11. Even after my parents stop arguing they stay mad at each other
21.* When my parents disagree about something, they usually come up with a solution
30.* When my parents argue they usually make up right away
41.* After my parents stop arguing, they are friendly toward each other
48. My parents still act mean after they have had an argument

Content
3. My parents often get into arguments about things I do at school
22. My parents' arguments are usually about something I did
31. My parents usually argue or disagree because of things that I do
39. My parents often get into arguments when I do something wrong

Perceived Threat
7. I get scared when my parents argue
17. When my parents argue I worry about what will happen to me

26. When my parents argue I'm afraid that something bad will happen
35. When my parents argue I worry that one of them will get hurt
42. When my parents argue I'm afraid that they will yell at me too
47. When my parents argue I worry that they might get divorced

Coping Efficacy
6.* When my parents argue I can do something to make myself feel better
15. I don't know what to do when my parents have arguments
25.* When my parents argue or disagree I can usually help make things better
34. When my parents argue there's nothing I can do to stop them
46. When my parents argue or disagree there's nothing I can do to make myself feel better
51. When my parents argue they don't listen to anything I say

Self-Blame
9.* I'm not to blame when my parents have arguments
19. It's usually my fault when my parents argue
28. Even if they don't say it, I know I'm to blame when my parents argue
43. My parents blame me when they have arguments
50.* Usually it's not my fault when my parents have arguments

Triangulation
8. I feel caught in the middle when my parents argue
18.* I don't feel like I have to take sides when my parents have a disagreement
27. My mom wants me to be on her side when she and my dad argue
36. I feel like I have to take sides when my parents have a disagreement
44. My dad wants me to be on his side when he and my mom argue

Stability
13. My parents have arguments because they are not happy together
23. The reasons my parents argue never change
32. My parents argue because they don't really love each other
49. My parents have arguments because they don't know how to get along

---

NOTE.—Items marked with an asterisk should be reverse scored. Items 4, 12, and 18 are not listed because they were omitted from the final version of the CPIC.

References

Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile.* Burlington, VT: University Associates in Psychiatry.

Achenbach, T. M., McConoughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin,* **101,** 213–232.

Amato, P. R., & Keith, B. (1991). Consequences of parental divorce for the well-being of children: A meta-analysis. *Psychological Bulletin,* **110,** 26–46.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist,* **37,** 122–147.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology,* **51,** 1173–1182.

Casteneda, A., McCandless, B., & Palermo, D. (1956). The children's form of the Manifest Anxiety Scale. *Child Development,* **27,** 317–326.

Cohen, J. (1990). Things I have learned (so far). *American Psychologist,* **45,** 1304–1312.

Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin,* **101,** 393–403.

Cummings, E. M., Ballard, M., El-Sheikh, M., & Lake, M. (1991). Resolution and children's responses to interadult anger. *Developmental Psychology,* **27,** 462–470.

Cummings, E. M., Vogel, D., Cummings, J. S., & El-Sheikh, M. (1989). Children's responses to different forms of expression of anger between adults. *Child Development,* **60,** 1392–1404.

Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1981). Young children's responses to expressions of anger and affection by others in the family. *Child Development,* **52,** 1274–1281.

Emery, R. E., & O'Leary, K. D. (1982). Children's perceptions of marital discord and behavior problems of boys and girls. *Journal of Abnormal Child Psychology,* **10,** 11–24.

Emery, R. E., & O'Leary, K. D. (1984). Marital discord and child behavior problems in a nonclinic sample. *Journal of Abnormal Child Psychology,* **12,** 411–420.

Fantuzzo, J. W., DePaola, L. M., Lambert, L., Martino, T., Anderson, G., & Sutton, S. (1991). Effects of interparental violence on the psychological adjustment and competencies of young children. *Journal of Consulting and Clinical Psychology,* **59,** 258–265.

Fincham, F. D., & Bradbury, T. N. (in press). Marital conflict: Towards a more complete integration of research and treatment. *Advances in Family Intervention, Assessment and Theory.*

Forehand, R., & McCombs, A. (1989). The nature of interparental conflict of married and di-

vorced parents: Implications for young adolescents. *Journal of Abnormal Child Psychology*, **17**, 235–249.

Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin*, **108**, 267–290.

Grych, J. H., Seid, M., & Fincham, F. D. (April, 1991). *Children's cognitive and affective responses to different forms of interparental conflict.* Paper presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.

Hetherington, E. M., Cox, M., & Cox, R. (1982). Effects of divorce on parents and children. In M. E. Lamb (Ed.), *Nontraditional families: Parenting and child development* (pp. 233–288). Hillsdale, NJ: Erlbaum.

Jenkins, J. M., & Smith, M. A. (in press). Marital disharmony and children's behavioural problems: Aspects of a poor marriage that affect children adversely. *Journal of Child Psychology and Psychiatry.*

Johnson, R. A., & Wichern, D. W. (1988). *Applied multivariate statistical analysis.* Englewood Cliffs, NJ: Prentice-Hall.

Jouriles, E. N., Murphy, C. M., & O'Leary, K. D. (1989). Interspousal aggression, marital discord, and child problems. *Journal of Consulting and Clinical Psychology*, **57**, 453–455.

Kovacs, M. (1981). Rating scales to assess depression in school-aged children. *Acta Paedopsychiatry*, **46**, 305–315.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York: Springer.

Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment prediction tests: Their reliability and validity. *Marriage and Family Living*, **21**, 251–255.

Muller, J., & Kim, C. W. (1978). *Factor analysis: Statistical methods and practical issues.* Newbury Park, CA: Sage.

Nunnally, J. (1978). *Psychometric theory.* New York: McGraw-Hill.

Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems. *Journal of Abnormal Child Psychology*, **8**, 287–295.

Reynolds, C. R. (1980). Concurrent validity of what I think and feel: The Revised Children's Manifest Anxiety Scale. *Journal of Consulting and Clinical Psychology*, **48**, 774–775.

Reynolds, C. R., & Richmond, B. O. (1978). What I think and feel: A revised measure of children's anxiety. *Journal of Abnormal Child Psychology*, **6**, 271–280.

Reynolds, C. R., & Richmond, B. O. (1979). Factor structure and construct validity of "What I think and feel": The Revised Children's Manifest Anxiety Scale. *Journal of Personality Assessment*, **43**, 281–283.

Rutter, M. (1983). Stress, coping, and development: Some issues and some questions. In N. Garmezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 1–41). New York: McGraw-Hill.

Rutter, M., Yule, B., Quinton, D., Rowlands, O., Yule, W., & Berger, M. (1974). Attainment and adjustment in two geographical areas: III. Some factors accounting for area differences. *British Journal of Psychiatry*, **125**, 520–533.

Saylor, C. F., Finch, A. J., Spirito, A., & Bennett, B. (1984). The Children's Depression Inventory: A systematic investigation of psychometric properties. *Journal of Consulting and Clinical Psychology*, **52**, 955–967.

Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and the Family*, **41**, 75–88.