

BRIEF REPORTS

Extension of the Children's Perceptions of Interparental Conflict Scale for Use With Late Adolescents

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Although many studies have documented an association between interparental conflict (IPC) and child outcomes, the relation of specific dimensions of conflict to the adjustment of offspring remains largely unexplored. The Children's Perceptions of Interparental Conflict Scale (CPIC) was developed by J. H. Grych, M. Seid, and F. D. Fincham (1992) to assess school-aged children's perceptions of several dimensions of IPC. The purpose of the current study was to examine the suitability of the CPIC for use with late adolescents. The factor structure of the CPIC dimensions and indexes of reliability and validity were examined in a sample of 215 participants 17 to 21 years old. The emergent factor structure closely resembled the factor structure found with the younger sample. The CPIC also demonstrated good reliability and external validity.

Over the past several decades, empirical support has accumulated for the association between interparental conflict (IPC) and the adjustment of offspring in both divorced and intact families. Correlational and analogue studies have identified negative child outcomes in the areas of behavior problems, self-esteem, depression, anxiety, cognitive competence, and social skills (for reviews, see Amato & Keith, 1991; Emery, 1982; Grych & Fincham, 1990).

Fincham (1994) recently drew a distinction between first-generation and second-generation research in this area. He suggested that first-generation research, which focuses on documenting the association between IPC and child adjustment and ruling out other variables that might mediate or moderate this association, has been extensive. On the other hand, second-generation research, aimed at explaining the mechanisms that may account for the association between IPC and child outcomes, has lagged behind. One of the issues highlighted by Fincham (1994) is the need to assess the rela-

tionships between specific aspects of IPC and child adjustment.

Most studies to date have operationalized IPC only in terms of its frequency (cf. Grych & Fincham, 1990). However, recent efforts have been made to measure other dimensions, such as the content of the conflict (e.g., Hanson, Saunders, & Kistner, 1992) and how it is resolved (e.g., Kempton, Thomas, & Forehand, 1989). Grych, Seid, and Fincham (1992) developed a theory-based instrument, the Children's Perceptions of Interparental Conflict Scale (CPIC), to assess both the objective properties of IPC (i.e., its frequency, intensity, and resolution) and how the conflict is appraised by the child. Appraisals include the degree to which the child feels threatened by and unable to cope with the conflict, how concerned the child is about the conflict, and the degree to which the child blames himself or herself for the conflict.

In a sample of 9- to 12-year-olds, Grych et al. (1992) found significant associations between children's perceptions of the properties of IPC and their internalizing and externalizing behavior. Children's appraisals of threat and self-blame were also associated with their internalizing behavior. Cummings, Davies, and Simpson (1994) used the CPIC in another study, also with 9- to 12-year-olds, and again found significant associations between perceptions of IPC and child adjustment.

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Whereas studies of the relation of IPC to the adjustment of school-aged children and early adolescents have been numerous in recent years, outcomes for late adolescents have been relatively less studied. Yet, given the important developmental tasks of this transitional period, IPC would seem to have significant consequences for this age group (Hetherington & Anderson, 1987). Therefore, the current study was designed to examine the suitability of the CPIC for use with late adolescents by establishing the factor structure and reliability of the CPIC with this age group and by investigating the relation of perceptions of IPC to adolescent adjustment. Because of the unique developmental tasks of late adolescence (e.g., separation from the family of origin and identity formation), it was expected that differences might be found in the factor structure of the CPIC itself, as well as in the patterns of association between these factors and adjustment.

Method

Participants

Participants were 215 undergraduate students recruited from an introductory psychology course at a private eastern university. Students received course credit for their participation. The sample included 85 men and 130 women ranging in age from 17 to 21 years ($M = 18.6$). Participants were primarily Caucasian (83%), and most (63%) were from middle-class to upper-middle-class families, according to Hollingshead's (1975) four-factor classification system. Seventy-eight percent of the participants were from intact families, and the remaining 22% were from divorced or separated families. The intact and divorced-separated groups did not differ significantly in terms of age, socioeconomic status, family size, or racial composition ($ps > .15$). There was a larger proportion of female participants than male participants from intact families, $\chi^2(1, N = 215) = 2.83, p = .09$.

Procedure

All participants completed the CPIC and a demographic questionnaire in groups of approximately 20 to 40. A subset ($n = 60$) of the sample also completed a self-esteem inventory and a measure of social desirability. A different subset ($n = 155$) returned 2 weeks later to complete the CPIC for a second time, allowing examination of the test-retest reliability of scores. All questionnaires were coded with identifi-

cation numbers to protect the anonymity of participants.

Measures

CPIC. The CPIC (Grych et al., 1992), a 49-item child-completed questionnaire, assesses 10 dimensions of IPC: frequency, intensity, content, resolution, threat, coping efficacy, content (child related vs. non-child related), triangulation, stability, and self-blame. It uses a multiple-choice format with three possible responses: true, sort of true, and false. Items are scored from 1 to 3, with 3 reflecting more negative forms of conflict and its appraisal. Grych et al. (1992) factor analyzed the CPIC with two independent samples of fourth- and fifth-grade children. Three reliable factors emerged: Conflict Properties (frequency, intensity, and resolution), Threat (threat and coping efficacy), and Self-Blame (content and self-blame). The CPIC has demonstrated adequate internal consistency and test-retest reliability, as well as concurrent and criterion validity. In fact, CPIC scores have been shown to be more predictive of child adjustment than scores on three other commonly used measures of marital conflict and satisfaction (Grych et al., 1992).

Participants from intact families were instructed to respond in reference to conflict between their biological parents. Participants from divorced or separated families were instructed to complete the CPIC in reference to conflict between their biological parents before the parents' separation. However, 5 participants from divorced families completed the CPIC in reference to conflict between a parent and step-parent; to maintain consistency in the data, we excluded these 5 participants from the subsequent factor analysis of the CPIC.

Multidimensional Self-Esteem Inventory (MSEI). Global self-esteem, competence, and identity integration were measured via the MSEI (O'Brien & Epstein, 1988). The MSEI is a 116-item Likert-type self-report measure that assesses global self-esteem, eight components of self-esteem, identity integration, and defensive self-enhancement.

Identity integration was selected as one of the outcome variables for this age group because adolescence is viewed as the time when individuals struggle to integrate private and public notions of themselves and multiple roles (Erikson, 1968). High scores on the Identity Integration subscale reflect a clear sense of identity: The person knows who he or she is and has an inner sense of cohesion and integration of different aspects of self-concept.

Competence and general self-esteem were also selected as general indicators of adjustment that are applicable across age groups. High scores on the Competence subscale indicate belief in one's ability to perform tasks competently and learn new skills

quickly. High scores on the Global Self-Esteem subscale indicate that respondents are pleased with themselves, feel significant as individuals, are self-confident, are pleased with the past, and expect future success.

O'Brien and Epstein (1988) conducted a number of studies of the reliability and validity of the MSEI. The Global Self-Esteem, Competence, and Identity Integration subscales were found to have 1-month test-retest correlations of .87, .86, and .78, respectively. Extensive, supportive validity data can be found in the MSEI professional manual (O'Brien & Epstein, 1988).

Marlowe-Crowne Social Desirability Scale. Because the data were obtained by self-report, a measure of social desirability was used to check for potential response bias. The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) is a 33-item, true-false scale designed to assess defensiveness and attempts to appear socially desirable. High scores on this measure reflect a desire for social approval and a need to respond in culturally sanctioned ways (Crowne & Marlowe, 1960). For the present study, the 8 participants (3 men and 5 women) who scored at least one standard deviation above the mean, based on the norms obtained by Crowne and Marlowe (1960), were excluded from the data analysis.

Results

Factor Analyses of the CPIC

A principal-components factor analysis (using promax rotation) was performed to examine whether the individual dimensions assessed by the CPIC could be adequately represented by a smaller number of factors. With the traditional eigenvalue cutoff of 1.0, two factors emerged. However, a third factor, with an eigenvalue of .82, was found to contribute an additional 9% of variance and produced a more conceptually meaningful solution. In keeping with the coping model proposed by Grych and Fincham (1990) and the original factor structure of the CPIC (Grych et al., 1992), the three factors were identified as Conflict Properties, Threat, and Self-Blame (see Table 1). Although Grych et al. (1992) found that two of the CPIC dimensions (triangulation and stability) did not load consistently on any of their three factors, both of these dimensions produced significant loadings on the Conflict Properties factor in the current study. The intercorrelations among the three factors were as follows: Conflict Properties and Threat, $r = .67, p < .0001$; Conflict Properties

Table 1
Factor Loadings of Children's Perceptions of Interparental Conflict Scale Dimensions (n = 210)

Dimension	Conflict properties	Blame	Threat
Content	-0.04	0.91	-0.04
Coping efficacy	-0.04	-0.09	-0.95
Frequency	0.85	-0.01	-0.12
Intensity	0.57	0.05	-0.41
Perceived threat	0.04	0.04	-0.86
Resolution	0.88	-0.04	-0.07
Self-blame	-0.03	0.95	0.08
Stability	1.02	-0.07	0.20
Triangulation	0.54	0.18	-0.18
Variance	0.53	0.18	0.09
Eigenvalue	4.75	1.62	0.82

Note. Principal-components factor analysis was performed with promax rotation. Weights above .50 are boldfaced.

and Self-Blame, $r = .21, p < .01$; and Threat and Self-Blame, $r = .27, p < .001$.

Reliability of CPIC Subscales

The reliability of the CPIC with a late adolescent sample was assessed by examining the internal consistency and test-retest reliability of the subscales. The CPIC evidenced good internal consistency, with Cronbach alphas of .95 for the Conflict Properties scale, .88 for the Perceived Threat scale, and .85 for the Self-Blame scale. The factors of the CPIC also demonstrated good test-retest reliability over a 2-week period, with Pearson correlations of .95 for the Conflict Properties scale, .86 for the Perceived Threat scale, and .81 for the Self-Blame scale. It should be noted, however, that Self-Blame scores were positively skewed and were not amenable to statistical transformation.

External Validity

Because the CPIC has been used previously only with a younger population, the correlations between the subscale scores and three outcome variables (identity integration, competence, and global self-esteem) were examined to assess the external validity of the CPIC in a late adolescent sample. The Conflict Properties scale was related only to competence ($r = -.24, p < .10$). Perceived Threat was significantly correlated with all three outcome variables: self-esteem

($r = -.50$, $p < .001$), competence ($r = -.38$, $p < .01$), and identity integration ($r = -.37$, $p < .01$).

Multiple regression analyses were used to examine potential moderators of the relationship between threat and identity. No significant moderating effects of gender, socioeconomic status, or age at time of divorce were found for identity integration, $t_s(1) = -1.24$, 0.04 , and -1.03 (*ns*), respectively; competence, $t_s(1) = -0.37$, -0.05 , and -0.35 (*ns*), respectively; or global self-esteem, $t_s(1) = -0.29$, 0.30 , and 0.83 (*ns*), respectively.

Family Structure

Because the mechanisms underlying the association between IPC and adolescent outcomes may be different for offspring from intact and divorced families, levels of IPC by family structure were examined. Adolescents from divorced or separated families reported significantly higher levels of conflict properties, $t(199) = -5.91$, $p < .001$, and threat, $t(200) = -2.98$, $p < .01$, whereas those from intact families reported higher levels of self-blame, $t(206) = 2.01$, $p < .05$.

When a principal-components analysis was performed with only the data from adolescents from intact families ($n = 167$), the factor structure was identical to that of the entire sample. The number of participants from divorced families ($n = 48$) was not sufficient to allow a separate analysis of the CPIC factor structure for that group.

Discussion

Several of the findings of this study confirm the usefulness of the CPIC with late adolescents: the consistency of the scale's factor structure with a theoretical model of coping with IPC, the reliability of those factors, and the significant associations between aspects of IPC (as measured by the CPIC) and adolescent identity integration, competence, and self-esteem.

On the other hand, some caution should be exercised in interpreting the meaning of Self-Blame scores with this age group as a result of the floor effect found for this factor. Several theoretical approaches suggest that children differentially interpret events based on their level of emotional and cognitive development

(Bowlby, 1980; Kohlberg, 1984; Piaget, 1975). More specifically, some research suggests that younger children are more likely to blame themselves for marital disruption than are older children (see Grych & Fincham, 1990). Thus, the floor effect of the Self-Blame factor may be indicative of the lack of developmental relevance of this construct among late adolescents.

The pattern of associations between IPC and adjustment found in this age group also differs from what has been found with school-aged children. Although Grych et al. (1992) found the objective properties of IPC to be most closely related to the adjustment of fourth and fifth graders, these properties were only modestly associated with late adolescent competence; the perceived threat of the conflict was most consistently associated with adolescent adjustment in the current study. In addition, the dimensions of triangulation and stability were found to load on the Conflict Properties factor, whereas they did not consistently load on a single factor in the Grych et al. (1992) study.

However, this pattern of findings remains consistent with Grych and Fincham's (1990) cognitive-contextual framework, which takes into account developmental differences. This model proposes that children's responses to IPC are mediated by two different stages of appraisal. The first stage involves a primarily affective response, whereas the second stage involves attempts to understand why the conflict is occurring and to decide how to respond. Grych and Fincham (1990) suggested that young children's responses to conflict tend to be emotion focused, reflecting primary processing. However, as children grow older and mature cognitively, their ability to understand the threats posed by marital conflict and to hypothesize about potential outcomes increases, thereby permitting more problem-focused responses to IPC. Thus, it stands to reason that adolescent identity would be most influenced by that which mobilizes the adolescent in the face of IPC, namely, his or her appraisals of threat.

The appearance of the triangulation and stability dimensions on the Conflict Properties factor, in contrast to the results of Grych et al. (1992), suggests that these aspects of IPC may have a different meaning for late adolescents than for fourth- and fifth-grade children. One hypothesis is that items on these subscales require greater cognitive sophistication and were

thus more easily understood by the older sample. For example, responding to the statement "The reasons my parents argue never change" may require a greater capacity for perspective taking and reasoning about the underlying intent of human behavior than most 9- to 12-year-olds possess.

As might be expected, adolescents from divorced and separated families reported more frequent, intense, and unresolved IPC, as well as greater threat, than their counterparts from intact families. However, an interesting finding was that higher levels of self-blame were reported by adolescents from intact families. It has been found that IPC generally decreases after a divorce (Amato & Keith, 1991). It may be hypothesized that observing a decrease in IPC after a divorce allows offspring to make more external attributions of blame for the conflict. However, whether our finding reflects a lingering self-blame among adolescents in intact families or a statistical artifact is unclear and requires additional exploration.

Our findings highlight the need to continue to assess the multiple aspects of IPC so that the mechanisms linking conflict to child outcomes may eventually be better understood. Furthermore, the need for such assessments to take into account the relevant developmental issues of various age groups is emphasized.

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