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Child and Parent Perceptions of Interparental Relationship Conflict Predict Preschool Children's Adjustment

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Abstract

Interparental relationship conflict has consistently been linked to child adjustment problems, with children's perceptions of such conflict particularly predictive of their outcomes. Despite mounting evidence that preschool children can provide reliable and valid accounts of family functioning, little research has examined preschool children's perceptions of interparental conflict. The present study employed a multi-informant design for both reports of interparental conflict (preschool children and their mothers and fathers) and reports of child adjustment (preschool children, their mothers and fathers, and their preschool teachers). Children completed pictorial measures of interparental conflict and of self-esteem that paralleled questionnaires completed by adult respondents. For both child behavior problems and child self-esteem, preschool children's perceptions of interparental conflict predicted their adjustment. Preschool children's reports of interparental conflict were significantly associated with their self-esteem and with both parents' and teachers' reports of child behavior problems, and this association remained significant when controlling for parents' reports of interparental conflict. Further, the interaction between parents' reports and children's reports of interparental conflict added unique variance to the prediction of preschool teachers' reports of children's behavior problems.

Keywords

Interparental conflict; children's perceptions; early childhood

Interparental relationship conflict has been associated with a variety of child adjustment problems (for reviews, see Cummings & Davies, 2010; Grych & Fincham, 2001). For instance, exposure to interparental conflict has been shown to predict children's heightened

emotional reactivity and maladaptive behavior in response to interadult conflict (Cummings & Davies, 1994), as well as children's negative self-perceptions (Grych, Wachsmuth-Schlaefel, & Klockow, 2002), poor behavioral adjustment (Jenkins, Simpson, Dunn, Rasbash, & O'Connor, 2005), academic difficulties (Harold, Aitken, & Shelton, 2007), problematic peer relations (Katz & Woodin, 2002), and sleep disturbance (Keller & El-Shiekh, 2011). Moreover, there has been much interest in understanding the mechanisms by which interparental discord may be linked to poor child adjustment, with appreciation for children as active processors of interparental conflict (Cummings & Davies, 2010; McDonald & Grych, 2006). Children's perceptions and cognitive-affective processing of their parents' relationship conflict are critical to their experience of such conflict, and subsequently, their adjustment both within and beyond their families. Clearly, parent perceptions contribute in important ways to understanding the relation between interparental conflict and children's adjustment; however, consideration of the child's perspective in relation to the parents' perspectives is necessary to understand the link between interparental conflict and child adjustment.

Importance of Children's Perceptions

With awareness of the importance of children's perspectives on interparental conflict, the field has generally moved away from exclusive reliance on parent reports of conflict. Indeed, over 20 years ago, Grych, Seid, and Fincham (1992) cogently articulated the importance of examining child reports of interparental conflict. Specifically, they argued that parent reports of their children's exposure to their parents' relationship conflict may underestimate the actual amount of conflict to which children are exposed and that parents may under-report children's exposure to interparental conflict for at least three reasons. First, parents may be reluctant to report arguing in front of their children, particularly when those arguments are destructive. That is, parents may be motivated to present a socially desirable picture of their relationship and parenting. Second, parents may truly be unaware that their children are observing interparental conflict. In the heat of an argument, parents may fail to realize that their voices have risen to a level that their child can overhear or that their child is in close proximity to the argument. Even if parents are aware of their child's presence, they may not recognize that their child is attending to the conflict.

Finally, even when aware that their children are observing interparental conflict, parents may interpret the conflict and its meaning differently than do their children. That is, what a parent would label a heated discussion, but not an argument per se, may be experienced as more negative and threatening by the child. As Cummings and colleagues have repeatedly demonstrated, children of conflictual relationships become sensitized to interparental conflict, and thus are acutely aware of and threatened by such conflict (e.g., Ballard, Cummings, & Larkin, 1993; Cummings, Zahn-Waxler, & Radke-Yarrow, 1984; Davies, Myers, Cummings, & Heindel, 1999; Davies, Sturge-Apple, Winter, Cummings, & Farrell, 2006; El-Sheikh, Cummings, & Reiter, 1996; Koss et al., 2012). Further, children's reports provide important information about their thoughts regarding interparental conflict and their own role in such conflict, whether or not those reports are objectively accurate representations of actual behavior (Grych, 1997). Thus, children's reports of interparental

conflict may represent not only the amount of conflict to which they are exposed, but also their sensitivity to such conflict.

Indeed, empirical evidence has accumulated over the past several decades to suggest that children's perceptions of interparental conflict predict their social, emotional, and behavioral adjustment, with most of such research focusing on school-aged children and adolescents. For instance, Grych et al. (1992) found that 4th and 5th grade children's perceptions of interparental conflict predicted child, parent, teacher, and peer reports of children's internalizing and externalizing behavior problems. Grych et al. noted that child reports of interparental conflict were more consistent predictors of child adjustment than were parent reports of interparental conflict. Subsequent studies have further supported the utility of children's perceptions of interparental conflict in predicting their social, emotional, and behavioral adjustment, with children's perceptions predicting at least as well as and often better than parents' reports (e.g., Buehler et al., 1998; Dadds, Atkinson, Turner, Blums, & Lendich, 1999; DeBoard-Lucas, Fosco, Raynor, & Grych, 2010; Fosco & Grych, 2008; Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Harold, Fincham, Osborne, & Conger, 1997; Kerig, 1998; Kitzmann & Cohen, 2003; Rogers & Holmbeck, 1997).

Preschoolers' Perceptions of Intrapersonal and Interpersonal Functioning

Although there is both theoretical and empirical consensus about the importance of children's perceptions of interparental conflict in predicting their adjustment, the vast majority of this research has focused on school-aged children and adolescents. Preschool children, who can neither read nor complete written questionnaires, have been relatively neglected in the study of children's perceptions of interparental conflict, despite clear evidence that interparental conflict is associated with adjustment difficulties in this age group (e.g., El-Sheikh et al., 1996; Ingoldsby, Shaw, Owens, & Winslow, 1999). Moreover, obtaining preschoolers' reports of interparental conflict may be particularly important given key developmental differences between preschool children and both older and younger children. For example, preschoolers tend to see themselves as the cause of marital difficulties to a greater degree than do older children (Kurdek, 1986; Wallerstein & Kelly, 1980). In addition, preschoolers are more attuned to angry interchanges than are toddlers (Cummings, 1987). This combination of greater self-blame and heightened sensitivity may exacerbate the negative effects of interparental conflict at a particularly formative time for preschoolers' developing sense of self (Christie-Mizell, 2003).

Developmentally appropriate measures for preschool children have been created and have demonstrated reliability and validity. Such measures include doll play tasks (Bretherton, Oppenheim, Buchsbaum, Emde, & the MacArthur Narrative Working Group, 1990; McCarthy, 1998; McHale, Johnson, & Sinclair, 1999), puppet interviews (Ablow & Measelle, 1993; Eder, 1990; McCarthy, 1998; McHale et al., 1999; Sessa, Avenevoli, Steinberg, & Morris, 2001), pictorially presented items (Ederer, 1998; Harter & Pike, 1984), and experimenter interviews (Bost, 1995; Derscheid, Kwon, & Fang, 1996; Franco & Levitt, 1997; Raag & Rackliff, 1998). Studies using such methods have demonstrated that preschool-aged children are able to report upon their own well-being and close relationships and that these self-reports are linked in meaningful ways to children's functioning in such

areas as peer acceptance (Bost, 1995; Franco & Levitt, 1997), academic performance (Measelle, Ablow, Cowan & Cowan, 1998), and family adjustment (McHale et al., 1999); however, many of these measures are quite labor intensive to administer and/or score and require extensive training to use. Nonetheless, across a variety of response formats and study topics, preschool children's reports of numerous interpersonal and intrapersonal constructs have been shown to possess reliability and validity and to be associated in unique and important ways with their adaptation and well-being.

Of particular relevance to the present investigation are two recent studies focusing on the validity of young children's reports of interparental conflict. Using the Berkeley Puppet Interview, Ablow, Measelle, Cowan, and Cowan (2009) found that young children (ages 5 to 6 years, $M_{\text{age}} = 5.6$ years) could reliably report on their parents' marital relationship processes and that dimensions of child-reported interparental conflict were moderately correlated with parent-reported conflict. In contrast, Miller, Howell, and Graham-Berman (2012) found no association between child- and mother-reported conflict in their sample of 4 – 6 year-old children ($M_{\text{age}} = 5.0$ years) and their mothers who had experienced severe intimate partner violence. However, it should be noted that the child-reported conflict measure used in the Miller et al. study was originally developed for school-aged children (Grych et al., 1992) and that 16% of the child sample was lost due to children's judged inability to effectively report. Nonetheless, in both studies, children's perceptions of interparental conflict predicted dimensions of their behavioral functioning, including teacher-reported internalizing and externalizing problems (Ablow et al., 2009) and child-reported appraisals of threat (Miller et al., 2012). Ablow et al. also found that, paralleling findings with older children, children's reports partially mediated the link between parent-reported conflict and teacher-reported adjustment.

Aims of the Current Study

Taken together, research to date has clearly demonstrated that interparental conflict has negative implications for children's adjustment. Further, prediction of school-aged children's adjustment from their own perceptions of interparental conflict has been shown to equal or surpass the prediction obtained by parents' reports. Finally, despite compelling evidence that preschoolers can provide reliable and valid information about individual and family functioning, research on children's perceptions of interparental conflict in this age group remains limited. Specifically, although recent studies by Ablow et al. (2009) and Miller et al. (2012) offer promising evidence for the links between young children's perceptions of interparental conflict and their behavioral adjustment, at least three significant questions remain. First, is it possible to demonstrate similar patterns of results in even younger, preschool-aged children? Second, can a pictorial, self-report measure of interparental conflict demonstrate adequate sensitivity to young children's perceptions? Third, can previous study findings be replicated by other researchers in other settings?

The present study was designed to address these questions by examining the links between child and parent perceptions of interparental conflict and child adjustment in a community sample of families with 4-year-old children. We had two specific hypotheses. First, based on previous research, we expected modest associations between parent and child reports of

interparental conflict. Second, we expected higher levels of perceived interparental conflict to be associated with poorer behavioral adjustment, specifically lower child self-esteem (as reported by children, parents, and teachers) and more behavior difficulties (as reported by parents and teachers). Based on previous research with school-aged children, we anticipated that children's perceptions of interparental conflict would make a unique contribution to the prediction of their behavioral adjustment, beyond the prediction obtained by parents' reports of interparental conflict alone. That is, we expected that the prediction of children's self-esteem and behavior difficulties would be significantly improved by including children's reports of interparental conflict. Finally, to examine the possibility that the prediction obtained by children's reports depended on the level of interparental conflict, we also computed and examined an interaction term for parent and child reports.

Method

Participants

Participants were 78 four-year-old children (50 girls) and their parents. Families were recruited from a semi-rural area of the Northeast via advertising in the local newspaper and through letters sent to families identified through cross referencing birth, residency, and divorce records.

The county from which participants were drawn was 94% Anglo with a mean annual married couple household income of \$55,806, adjusted for inflation (U.S. Census Bureau, 1990). The current sample self-identified as 92% Anglo, with 1% each Asian American, Native American, and Latino (the remaining 5% chose not to indicate their ethnic or racial background). The average family income in the current sample was \$55,579 dollars ($SD = \$25,814$, range \$12,000 to \$175,000). The educational level of the sample was high, with 86% of mothers ($M = 15.79$ years of education, $SD = 2.41$, range 12 to 22 years) and 85% of fathers ($M = 15.93$ years of education, $SD = 2.68$, range 11 to 23 years) reporting at least some college attendance.

The average length of marriage was 9.6 years ($SD = 3.82$). This was the first marriage for 90% of wives and 86% of husbands. Most families had at least two children (79%), and the target child was the firstborn child for 47% of the sample.

Procedures

Families made two visits to the research lab. The first involved both parents and the child. In this visit, information about marital, parent-child, and individual functioning was collected. The second visit was a peer visit involving only the children. Only the family lab session was of interest to the current study, and only relevant measures and procedures from that session are described below.

Upon arriving at the lab, families were first given an overview of the upcoming research session. After providing informed consent, parents independently completed self-report measures assessing various domains of parenting and marital relations, including interparental conflict. They also provided information about their children's functioning. In a different room with the help of a trained research assistant, children completed an

interactive, videotaped measure of self-esteem and a pictorial questionnaire assessing their perceptions of their parents' interparental conflict. Following the completion of several interaction tasks and additional questionnaires, families were debriefed and paid \$35, and children were allowed to select a toy to take home.

Measures

Demographics—Parents independently provided demographic information, including their own educational attainment, family income levels, and a rating of the degree to which their resources were sufficient to meet family needs. Items were standardized, and the mean taken. The resulting index of socioeconomic functioning was internally consistent, $\alpha = .76$.

Interparental conflict: Parent perceptions—Parents' perceptions of interparental relationship conflict were obtained using the Conflict Tactics Scale (CTS; Straus, 1979), the most widely used index of relationship aggressive conflict. Individuals were asked to report upon their own behaviors and their partner's behaviors over the past year using a 6-point scale ranging from 0 (*never*) to 5 (*more than once a month*). The CTS was designed to assess behaviors in three different areas: Verbal Reasoning (e.g., “*Tried to discuss the issue relatively calmly*”), Verbal Aggression (e.g., “*Yelled and/or insulted*”), and Physical Aggression (e.g., “*Pushed, grabbed, or shoved the other*”), but only the Verbal Aggression and Physical Aggression scales were of interest in the current study. In summarizing research on the CTS, Straus (1990) reported acceptable reliabilities, with internal consistencies ranging from .62 to .88 for Verbal Aggression ($M = .78$) and .69 to .88 for Physical Aggression ($M = .82$). In the current study, internal consistencies averaged .76 (range .62 for Wives' self-reports of Verbal Aggression to .94 for Wives' self-reports of Physical Aggression).

In order to reduce the number of variables, maternal and paternal reports of interparental relationship conflict were examined to determine if they could be combined to create a single parental score. Levels of husbands' and wives' Verbal and Physical Aggression were significantly correlated across self- and partner-reports ($M_r = .39$, all $ps < .002$). Additionally, husbands' and wives' self-reports of Verbal and Physical Aggression were significantly correlated, with rs ranging from .32 to .36, $ps < .004$, except for wives' and husbands' self-reports of Physical Aggression, $r(78) = .04$, $p = .71$. The lack of association for Physical Aggression reflects the substantial restriction in range of these behaviors for both partners in the current community sample.

Factor analytic studies of the CTS have suggested the possibility that the Verbal and Physical Aggression items may not represent cleanly separable factors. For instance, TenVergert, Kingma, and Gillespie (1990) suggested that the more violent items on the CTS represent a difficulty factor, and Caulfield and Riggs (1992) found verbal threats to load on the Physical Aggression factor rather than the Verbal Aggression factor. In the current community sample, the creation of a single score combining husbands' and wives' self- and partner-reports of Verbal and Physical Aggression resulted in a single, reliable index of interparental aggression ($\alpha = .88$), which was significantly correlated with self-reports of

husbands' and wives' Verbal and Physical Aggression ($M_r = .60$, range .32 to .79, all $ps < .005$).

Interparental conflict: Child perceptions—Children's perceptions of interparental conflict were assessed using the Perceptions of Adult Conflict Tactics (PACTS; Dominguez, Markman, & Rossman, 1993). This pictorial measure was adapted from the CTS and contains 6 items measuring interparental Verbal Aggression (e.g., "Some mothers yell and shout when the parents fight") and 10 items measuring interparental Physical Aggression (e.g., "Other fathers push, grab, or shove the mother when the parents fight"). The original measure utilized hand drawn pictures. In the current study, the original drawings were replaced with computer graphics in order to more precisely control for the specific variables of interest by insuring that the two pictures were identical in all other ways.

The PACTS questionnaire utilized a hierarchical, forced-choice format taken from the widely used Pictorial Scale of Perceived Competence and Acceptance for Young Children (Harter & Pike, 1984). Children were first presented with two pictures of parents arguing and asked to identify which of the two pictures was most like their parents. Within each pair, one drawing depicted the targeted interparental aggressive conflict, and the other did not. After choosing the picture most like their parents' behaviors, children were asked to indicate the degree to which their parents engaged in the specific behavior depicted, again choosing from two options. The advantage of the hierarchical, forced-choice format is that the child makes two relatively simple dichotomous decisions, thus allowing for a more fine grained determination of the child's perceptions than would otherwise be possible in this preschool sample. The responses then corresponded to a 4-point Likert type scale indicating the frequency (1 = *never*, 2 = *sometimes*, 3 = *most of the time*, 4 = *always*) of each aggressive act.

Dominguez (1995) reported internal consistencies ranging from .53 to .70 for the Verbal Aggression scale and from .77 to .87 for the Physical Aggression scale in a sample of 103 five-to 13-year-old children and their mothers. Test-retest reliabilities across a 4- to 6-week span averaged .66. Further, Dominguez reported significant positive correlations between the PACTS and mothers' reports of interparental Verbal and Physical Aggression from the CTS and significant negative correlations with parental relationship satisfaction.

Jones (2010) factor analyzed the PACTS and found that a single factor best described the measure. In the current study, an overall index of children's perceptions of interparental conflict was obtained by taking the mean across all Verbal Aggression and Physical Aggression items ($\alpha = .91$).

Children's self-esteem—Children's, parents', and teachers' reports of children's self-esteem were obtained. Children's reports were obtained using the 32-item Self-Concept Puppet Show (SPS; Eder, 1990). In the SPS, children respond to two puppets with sex-typed clothes and hair matched to the sex of the child. For each item, one puppet made a positive self-statement (e.g., "People like me") whereas the other puppet made an opposing statement (e.g., "People don't like me"). Children were then asked to indicate which puppet was most like them, with positive statements scored 1, and negative statements scored 0.

Eder (1990) used live performances to interview children. In the current study, videotaped presentations of the puppets were used to ensure that the stimuli were consistent across participants. The original measure included 7 subscales: Social Closeness (e.g., “I have a best friend”), Aggression (e.g., “Sometimes it’s fun to scare people”), Alienation (e.g., “Nobody wants to be around me”), Harm Avoidance (e.g., “It’s not fun to ride in a fast car”), Stress Reaction (e.g., “I am grumpy a lot of the time”), Traditionalism (e.g., “I never do naughty things”), and Well-Being (e.g., “I’m usually happy”). In the current study, the individual subscales had internal consistencies of .35 to .58, which were slightly lower than the original study values of .43 to .60. Thus, a multidimensional assessment of the child’s self-concept did not appear to be indicated in the current sample. A total score was created by summing all items, and this score evidenced adequate reliability, $\alpha = .69$.

Parents’ and teachers’ perceptions of children’s self-esteem were obtained using the Behavioral Rating Scale of Presented Self-Esteem in Young Children (Haltiwanger, 1995). This 15-item questionnaire assesses children’s behaviorally expressed confidence (e.g., “Initiates activities confidently”), involvement (e.g., “Does not hang back; does more than watch, is involved”), goals (e.g., “Prefers activities that stretch his/her abilities; sets high goals”), self-descriptions (e.g., “Describes self in generally positive terms”), and pride (e.g., “Shows pride in his/her work or accomplishments”). Parents’ and children’s preschool or daycare teachers responded using a 4-point rating scale. Total scores were created by taking the mean of all items. Ratings of child self-esteem were found to be internally consistent for teachers ($\alpha = .90$), mothers ($\alpha = .83$), and fathers ($\alpha = .85$). Because mothers’ and fathers’ reports of children’s self-esteem were highly correlated, $r(78) = .64, p < .001$, and the combination of maternal and paternal reports resulted in an internally consistent scale, $\alpha = .90$, a combined parent report of children’s self-esteem was used.

Children’s behavior difficulties—Parents’ and teachers’ reports of children’s behavior difficulties were obtained using the Conners scales. Parents completed the Conners Parent Questionnaire (Conners, 1985), from which the 10-item Conners Abbreviated Parent Questionnaire (CAPQ) was extracted. Formed by taking the 10 most highly loaded symptoms from each of the scales on the original measure, the CAPQ score has been recommended for screening purposes (Sattler, 1992) because it assesses common internalizing and externalizing problems. Parents rated children’s behavior difficulties including “Cries easily or often,” “Destructive,” and “Easily frustrated in efforts” using a 0 (*not at all*) to 3 (*very much*) scale. Total scores are then converted to *T*-scores, with higher values indicating more behavior difficulties. In the current sample, the CAPQ evidenced good internal consistency, with $\alpha = .78$ for mothers’ reports and $\alpha = .71$ for fathers’ reports. Because parents’ CAPQ scores were significantly correlated, $r(78) = .50, p < .001$, and the combination of parents’ reports resulted in an internally consistent scale, $\alpha = .82$, a single index of children’s behavioral adjustment was created by taking the mean of maternal and paternal CAPQ *T*-scores.

Children’s preschool or daycare teachers completed the Conners Teacher Questionnaire (Conners, 1985), from which the 10-item Conners Abbreviated Teacher Questionnaire (CATQ) was extracted. The CATQ evidenced very good internal consistency, $\alpha = .89$.

Results

The results are presented in two sections. First, descriptive information about major study variables, including bivariate correlations between parent and child conflict perceptions, is presented. These correlations were used to examine the hypothesis that parents and children would offer unique perspectives on interparental conflict, with only modest associations predicted between child- and parent-report. Correlations were also used to examine, in a bivariate fashion, the associations between child and parent perceptions of interparental conflict and children's self-esteem and behavioral adjustment. Second, hierarchical multiple regressions are presented in which children's self-esteem and behavior difficulties are predicted from parent-reported interparental relationship conflict, child-reported interparental conflict, and the interaction of parent- and child-reports. These analyses were conducted to examine the hypothesis that children's perceptions would add to the prediction of child functioning obtained by parents' reports of interparental conflict.

Descriptive Statistics

Means, standard deviations, and bivariate correlations for study variables are presented in Table 1. Child gender was dummy coded (0 for boys, 1 for girls) and examined in relation to all outcome variables and all reports of interparental conflict. As shown in Table 1, no correlations between gender and other study variables reached significance. Thus, child gender was dropped from subsequent analyses. Similarly, socioeconomic status was correlated with only one of five outcome variables. Regressions were then computed with and without socioeconomic status included as a predictor. As the pattern of results was identical and socioeconomic status was not a significant predictor in any regression, only the regressions omitting socioeconomic status are presented below.

When examined in a bivariate fashion, the correlation between child- and parent-reports of interparental conflict was not significant. Parent-reported interparental conflict was associated with two of five indices of children's functioning. Higher levels of parent-reported conflict were associated with lower levels of teacher-reported child self-esteem and higher levels of parent-reported child behavior difficulties. Child-reported interparental conflict was significantly associated with three of five outcome variables in the expected directions. Higher child-reported interparental conflict was significantly correlated with lower levels of child-reported self-esteem and higher levels of both parent- and teacher-reported behavior difficulties, but was not significantly correlated with parent- or teacher-reported child self-esteem.

Prediction of Child Self-Esteem from Perceptions of Interparental Conflict

Child-, parent-, and teacher-reports of child self-esteem were examined in separate hierarchical multiple regressions, presented in Table 2. To allow examination of the joint effects of parent- and child-report interparental conflict, these variables were centered, and a parent by child interaction term created. In each regression, parent-reported interparental conflict was entered on the first step, child-reported interparental conflict was entered on the second step, and the parent-by-child-report interaction term was entered on the final step.

Child-reported self-esteem—As shown in Table 2, child-reported self-esteem was significantly predicted by interparental conflict, $R^2 = .26$, $F(3, 74) = 8.74$, $p < .001$, but this relation was driven by child-reported interparental conflict. Neither parent-reported interparental conflict nor the parent-by-child-report interaction term was significantly associated with child-reported self-esteem. In contrast, higher child-reported interparental conflict was significantly associated with lower self-esteem.

Parent-reported child self-esteem—Parent-reported child self-esteem was not predicted by interparental conflict, $R^2 = .04$, $F(3, 74) = 1.09$, $p = .36$. Neither parent-reports, child-reports, nor the parent-by-child-report interaction term was associated with parent-reported child self-esteem.

Teacher-reported child self-esteem—Teacher-reported child self-esteem was associated with interparental conflict, $R^2 = .07$, $F(3, 64) = 2.76$, $p = .049$. Teacher-reported child self-esteem was significantly negatively predicted by parent-reported interparental conflict and marginally negatively predicted by the parent-by-child-report interaction term, but not predicted by child-reported interparental conflict.

Prediction of Children's Behavioral Difficulties from Interparental Conflict

Parent- and teacher-reported child behavioral difficulties were examined in separate hierarchical regressions. As shown in Table 2, parent-reported interparental conflict was again entered on the first step, followed by child-reported interparental conflict on the second step, and then the parent-by-child-report interaction term on the third step.

Parent-reported child behavior difficulties—Parent-reported child behavior difficulties were significantly predicted by interparental conflict, $R^2 = .12$, $F(3, 74) = 4.53$, $p = .006$. Higher parent- and child-reports of interparental conflict were both significantly associated with more behavioral difficulties, but the parent-by-child-report interaction term did not add to prediction.

Teacher-reported child behavior difficulties—Teacher-reported child behavior difficulties were significantly predicted by interparental conflict, $R^2 = .19$, $F(3, 63) = 4.92$, $p = .004$. Both higher child-reported interparental conflict and the parent-by-child-report interaction term were predictive of more child behavior difficulties.

To decompose the significant interaction term, the sample was split on parent-reported interparental conflict. As shown in Figure 1, when parents reported higher levels of interparental conflict, child-reported conflict was significantly positively associated with teacher-reported behavior difficulties, $R^2 = .25$, $B = 4.95$, $SE_B = 1.60$, $\beta = .50$, $p = .004$; however, this relation was not significant when parents reported low interparental conflict, $R^2 = .04$, $B = 1.70$, $SE_B = 1.43$, $\beta = .20$, $p = .24$.

Discussion

The purpose of the current study was to examine the roles of child and parent perceptions of interparental conflict in predicting preschoolers' adjustment, extending the existing literature

by assessing younger children, using simpler child-report measures, and examining these relations in a community sample. As expected, children and parents evidenced different perspectives on interparental conflict. Nevertheless, both child and parent reports of interparental conflict were associated with dimensions of child adjustment as reported by children, parents, and teachers. As such, both preschool-aged children and their parents offer important and meaningful perspectives on interparental relationship functioning, with implications for children's behavioral adjustment and development.

Preschoolers' Perspectives on Interparental Conflict

The current findings extend downward the growing literature addressing the capacities of young children to effectively report upon their own experiences, relationships, and well-being. Indeed, the results of the current study suggest that, when age-appropriate measures and response formats are used, preschoolers can provide meaningful self-report data. In the present study, we used the Perceptions of Adult Conflict Tactics Scale, a pictorial measure with a hierarchical forced-choice response format, to evaluate very young children's perceptions of interparental conflict. Children provided coherent reports of interparental relationship functioning that, consistent with Jones (2010), were best represented along a single dimension of interparental conflict (including both verbal and physical conflict). That children as young as four years of age are able to effectively report on general levels of conflict within their parents' relationship is an important finding, given that most previous research on children's perceptions of marital conflict has focused on early elementary school age (e.g., Ablow et al., 2009), middle childhood (e.g., McDonald & Grych, 2006), and adolescence (e.g., Grych et al., 2002).

However, preschoolers and their parents differed in their reports of interparental conflict, replicating a finding obtained with 4- to 6-year-old children and their mothers who had experienced severe intimate partner violence (Miller et al., 2012). In both studies, children's reports of conflict were not significantly correlated with parents' reports of conflict. To some extent, such findings may be unsurprising, given that child and adult informants often disagree in their reports of family behaviors and interactions (e.g., De Los Reyes & Kazdin, 2005; Taber, 2010). However, discrepant reports also raise important questions about how to reconcile such differences in the assessment of couple functioning and child outcomes, particularly with very young children. For example, although such findings might call into question the validity of either preschooler- or parent-reports of interparental conflict behaviors, Kraemer et al. (2003) have proposed an alternate understanding of discrepant multiple informant reports. They suggest that all reports are a combination of (a) the assessed trait dimension, (b) the context in which the dimension is observed, (c) the perspective of the informant that colors perceptions, and (d) measurement error. They further argue that differences in perspective and context, although often leading to uncorrelated reports, are critical to a valid assessment of the underlying trait dimensions, allowing for triangulation of the true level of the trait. That is, an understanding of the "true" experience of interparental conflict for very young children can only be achieved by examining and integrating information from multiple reporters, who may view such conflict through different lenses and in settings and times that do not entirely overlap.

From this framework, the discrepancy between parent and preschooler reports may be understood by considering the perspectives and contexts of children and parents with respect to interparental conflict. Their different perspectives on interparental conflict may lead young children and their parents to attend to disparate aspects of the conflict and to interpret conflict behaviors in divergent ways. For example, children are particularly sensitive to interparental conflict that is child-focused, unresolved, and expressed physically (Grych & Fincham, 1990), as such conflicts are likely to be interpreted by children as most significant to child and family well-being (Cummings & Davies, 2010). Furthermore, children's perspectives are likely to be strongly influenced by their history of exposure to such conflict, with clear evidence for increased sensitization over time (e.g., Goeke-Morey, Papp, & Cummings, 2013). Contextually, parents are privy to the entire spectrum of interparental conflict, including its antecedents and resolution, whereas children typically have access to only a subset of interparental conflict.

Preschoolers' and Parents' Perceptions of Conflict: Links to Child Adjustment

The current findings further underscore the importance of obtaining multiple perspectives on family functioning, as children and parents provide distinctively important information about family relationships and interactions. In support of this contention and consistent with previous work in this area (e.g., Ablow et al., 2009; Miller et al., 2012), both child- and parent-reports significantly predicted child functioning, despite the discrepancy between these reports. Specifically, preschoolers' perceptions of interparental conflict were significantly and uniquely associated in expected directions with several key child outcomes, including child-reported self-esteem and teacher- and parent-reported child behavior problems. Furthermore, children's reports contributed to the prediction of such outcomes beyond the variance accounted for by parent-reported conflict. Parents' perceptions of interparental conflict also predicted children's functioning, albeit with fewer significant associations than obtained with child reports. Parents' reports of interparental conflict were significantly related to teacher-reports of child self-esteem, and both parents' perceptions and children's perceptions of interparental conflict were important in predicting parent-reports of child behavior difficulties. Furthermore, teacher reports of children's behavior difficulties were also jointly predicted by child- and parent-reports, with child-reports particularly predictive of teacher-reported problems when parent-reported interparental conflict was high.

These findings suggest that preschoolers' perceptions of interparental conflict are important predictors of their adaptation to this important family stressor. However, children's perspectives on marital conflict predicted their functioning in some domains and not in others. This was particularly notable with respect to child self-esteem: Child-reported self-esteem was solely predicted by their perceptions of interparental conflict. On the one hand, this finding may suggest that children are simply better reporters of internal experiences that are largely unobservable to others (e.g., beliefs and feelings about the self). Alternatively, it may be that young children's perceptions of parental conflict behavior may be more important to their self-esteem than are parental perceptions of such behavior. For example, as Fincham, Grych, and Osborne (1994) have argued, declines in the self-esteem of children of conflictual parents may be related to children's self-blame or helplessness in the face of

interparental discord. That is, children's self-esteem may suffer because they attribute the cause of parental fighting to themselves, or alternatively, because they feel helpless with respect to their ability to exert influence over this fighting. In this way, young children's perceptions of interparental conflict are likely to be particularly important to their developing sense of well-being, competency, and self-esteem (Christie-Mizell, 2003; Cummings & Davies, 1994; 2010; Davies & Cummings, 1994). As such, the direct assessment of preschooler's views and beliefs about interparental conflict may be crucial to better understanding the links between family functioning and children's developing self-perceptions and self-esteem.

In contrast, adult reports of child self-esteem were not predicted by child-reports of interparental conflict, and only teacher reports of child self-esteem were predicted by parent-reports of interparental conflict. Again, it may be the case that adult observers have some difficulty reporting on children's internal sense of self. Both parent- and teacher-reports of children's self-esteem were quite high (3.3 on a scale of 1 to 4), and parent reports had relatively low variance. These descriptive statistics may reflect a certain lack of differentiation in adult reports of children's internal processes. On the other hand, parent-reported conflict did predict teacher-reported self-esteem, suggesting that the link between conflict and child self-esteem is robust enough to be observed across different reporters and settings.

Children's perceptions of marital conflict also emerged as a unique predictor of teacher-reported behavior problems and, in combination with parent-reported conflict, as a predictor of parent-reported behavior problems. Indeed, although children in the current sample were largely functioning in the normative range of behavioral adjustment, their perceptions of interparental conflict were reliably associated with more behavioral difficulties as reported by both parents and teachers. This finding adds to a large body of literature focused upon the relations between interparental conflict and child behavior problems (for reviews, see Cummings & Davies, 2010; Grych & Fincham, 2001). Findings further suggest that the associations between interparental conflict and child maladjustment may be observed in children as young as four years of age and that the negative effects of interparental conflict are strongly influenced by how the child perceives the conflict.

Our findings are also quite consistent with those from the few available studies that have focused on conflict perceptions and behavioral adjustment in children younger than seven years of age. Specifically, our findings complement and extend those obtained by Ablow et al. (2009) with 5- to 6-year-old children, and Miller et al. (2012) with 4- to 6-year-old children. In each of these studies, the findings clearly point to the importance of young children's perceptions of interparental conflict in predicting their behavioral adjustment. This consistency in findings is particularly striking given notable differences in study methodologies (e.g., use of a puppet play assessment in Ablow et al., 2009, as compared to the pictorial measure used in the current study) and sample characteristics (e.g., use of a severe intimate partner violence sample in Miller et al., 2012, as compared to a community sample in the present study). Finally, as noted previously, the current sample, in which all children were 4 years old, is younger than in both the Ablow et al. (2009) and the Miller et al. (2012) studies.

Importantly, although children's perceptions improved the prediction obtained by parent reports alone, this effect was not always linear. In some cases, the effect of child perceptions depended upon the level of parent-reported conflict. Notably, teacher reports of children's functioning revealed a significant interaction effect, such that teacher reports of children's behavior difficulties were more strongly associated with child-reported interparental conflict when parent-reported conflict was also high. It may be that interparental conflict was especially high in families in which both parents and children endorse high levels of conflict. That is, when interparental conflict is high, the ability of the child to process and understand parental conflict plays a critical role, and that children who are particularly attuned to such conflict sustain even greater impacts of their parents' conflict.

Summary and Limitations

In sum, preschool children's perceptions of interparental conflict emerged as significant predictors of their adjustment. As expected, children's reports of higher interparental conflict were associated with poorer functioning across child-, parent-, and teacher-reports of child outcomes. In contrast, parents' reports of interparental conflict were somewhat less consistently associated with child outcomes. The current findings add to the growing literature suggesting that children's perceptions of interparental conflict are important predictors of their adjustment to this family stressor. In addition, these findings highlight the role of children as active processors of their environment, and provide evidence for the value of preschool children's reports.

Despite these contributions, the current study had a number of limitations. Although children's perceptions of interparental conflict predicted their functioning across all reporters (parent- and teacher-reports as well as self-reports), the possibility of reporter and method bias must be considered. That is, the associations between children's reports of interparental conflict and their own self-esteem may reflect, in part, a reporting bias rooted in individual response styles and/or a method bias resulting from forced-choice response formats. Research utilizing observational assessment of children's adaptation and response to interparental conflict would further inform the understanding of these constructs.

In addition, parent- and child-reports of interparental conflict and child functioning were obtained at a single time point, with teacher reports of child functioning obtained shortly thereafter. It is not possible to determine the direction of causality in the relation between interparental conflict and children's behavior problems; however, longitudinal research with preschool and early school-aged children has generally supported the role of interparental conflict in leading to children's behavior problems rather than the converse causal direction (e.g., Ingoldsby et al., 1999; Kouros, Cummings, & Davies, 2010).

Finally, the assessment of children's perceptions of interparental conflict paralleled parents' reports of interparental conflict on the CTS, which can be considered both a strength and a limitation. That is, both children and parents reported on the verbal and physical conflict behaviors used by the marital partners. This approach, although allowing for the assessment of similar aspects of conflict across parent and child reports, does not allow for the assessment of conflict meaning such as self-blame and perceived threat. In their classic paper, Grych and Fincham (1990) noted that the processing of interparental conflict rested

on children's answers to three questions: "What is happening?" (i.e., the recognition that parental interparental conflict is occurring), "What does it mean?" (i.e., the determination of responsibility, blame, and threat), and "What can be done about it?" (i.e., the evaluation and enactment of potential coping strategies). The current study focused on the first of these questions in examining preschoolers' awareness and description of interparental conflict behaviors. Although it is encouraging that meaningful associations were obtained with the current measure of interparental conflict occurrence, further research is needed to better explore the remaining aspects of preschoolers' processing of interparental conflict.

Implications

The current study clearly indicates that children as young as preschool are active processors of their environment and that children's perceptions of interparental conflict are critical in predicting their behavioral and emotional adjustment to such conflict. Consequently, children's attunement to and experience of interparental conflict should be an important consideration in both assessment and treatment of children and families. Moreover, children's perceptions of such conflict, above and beyond their parents' perceptions, are critical to their outcomes. For this reason, therapist sensitivity to children's views is crucial for successful assessment and treatment efforts, and the pictorial measure employed here is a potentially useful alternative to other measures that have more intensive administration and training demands.

In addition to the therapy setting, these findings have implications for the legal system, particularly family court, child welfare, child advocacy, and child protective services. Members of such agencies would be well advised to carefully consider the impact of interparental conflict upon children, even when such conflict is not considered extreme by the parents.

Perhaps the arena in which these findings may have the largest impact, however, is within the family itself. Raising parental awareness of children's sensitivity to interparental conflict should clearly be a priority. When asked about their children's responses to interparental conflict, the most common comment offered by parents in the study was, "I do not think my child really notices when we fight." Interestingly, none of the children made such comments, and the current results suggest that preschoolers are sensitive to interparental conflict, that they can reliably report about such conflict, and that these reports predict their emotional and behavioral adjustment.

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Figure 1.
Relation between teacher-reported child behavior problems and child-reported interparental conflict by level of parent-reported interparental conflict.

Table 1

Descriptive Data for Study Variables

Variable	Reporter	1	2	3	4	5	6	7	8
Interparental Conflict									
1.	Child	—							
2.	Parents	.04	—						
Children's Self-esteem									
3.	Child	-.50***	.06	—					
4.	Parents	-.08	-.14	.09	—				
5.	Teachers	-.08	-.26*	.09	.34**	—			
Children's Behavioral Difficulties									
6.	Parents CAPQ	.26*	.25*	-.21	-.31**	-.14	—		
7.	Teacher CATQ	.35***	-.06	-.24*	-.16	-.42***	.17	—	
8.	Gender	.05	.06	.06	.11	.10	-.21	.15	—
9.	SES	-.27*	-.25*	.19	.15	.15	-.24*	-.09	-.04
<i>M</i>		1.75	0.62	22.51	3.30	3.27	50.95	47.07	.63
<i>SD</i>		0.68	0.42	4.39	0.37	0.55	7.17	6.53	—

Note. For all correlations except those involving teacher reports, $N = 78$. For correlations involving teacher reports of child self-esteem, $n = 68$. For correlations involving teacher reports of child behavior problems, $n = 67$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 2

Standardized Regression Coefficients for Hierarchical Regressions Predicting Child Outcomes from Parent and Child Perceptions of Marital Conflict

Step Predictor	Child Self-Esteem			Behavioral Difficulties		
	Child	Parent	Teacher	CAPQ	CATQ	
1 Couple CTS	.06	-.14	-.26*	.25*		-.06
2 Child PACTS	-.50***	-.08	-.07	.25*		.35**
3 CTS × PACTS	-.09	-.14	-.21	.17		.25*

Note. N = 78 for all analyses, except teacher's reports of child self-esteem (n = 68) and of behavior problems (n = 67). CAPQ = Conners Abbreviated Parent Questionnaire. CATQ = Conners Abbreviated Teacher Questionnaire. CTS = Conflict Tactics Scale. PACTS = Perceptions of Adult Conflict Tactics.

* p < .05.
** p < .01.
*** p < .001.