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Child-Related Disagreement, Conflict Resolution Strategies and Child Adjustment
Among Families with Toddler and Preschool-Aged Children

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A thesis submitted to the School of Graduate Studies
of the University of Ottawa as partial fulfilment of the requirements
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c Christine Beauregard, Ottawa, Canada, 2003



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Dedication

This thesis is dedicated to my family. They have provided me with the love, support and encouragement needed to achieve my goals both before I began this process and throughout. My husband and best friend Todd Briscoe has been my rock with respect to both personal and professional challenges faced along the way. My first child Sophie is credited with having been the motivation behind a desire to achieve my goals regardless of obstacles. My youngest child Kyra brightened my life further with her smiles and curiosity about the world. Thank you all for your patience and love.

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Abstract

The present study was designed to examine relations among parent ratings of child-related disagreement frequency, parent ratings of verbal aggression and of positive problem-solving frequency and parent ratings of child adjustment. One hundred and twelve couples volunteered for the study in response to advertisements published in newspapers or in community organizations/agencies (e.g., daycare centres, community centres, pediatric offices, etc.). Mothers ($n = 112$) and fathers ($n = 108$) with an eldest child who was a toddler or preschool-aged child independently responded to questionnaires. Their ratings of child behaviour problems and their ratings of satisfaction with the couple relationship were similar to those found in previous research with community samples. Compared to published data, couples in the present study reported a lower frequency of child-related disagreement and of verbal aggression strategies, and a higher frequency of positive problem-solving. Overall, they were a well-functioning sample of families with children who were perceived by parents as well-adjusted.

Mothers reported more frequent use of verbal aggression strategies than did fathers. Mothers of boys reported more frequent child-related disagreement and more frequent use of verbal aggression than did mothers of girls. Fathers perceived more externalizing problems among boys than among girls. Parent ratings of child-related disagreement were related to their ratings of child adjustment. Although parent ratings of conflict resolution strategies were less consistently associated with child behaviour problems, when examined in interaction with parent ratings of child-related disagreement, verbal aggression strategies moderated the relation between child-related disagreement and child adjustment among fathers of boys. Parent ratings of conflict resolution strategies did not mediate the relation. The findings of the present study

emphasize the importance of examining relations separately for boys and girls as well as for mothers and fathers and indicate that patterns of relations found among families characterized by high disagreement, high intensity conflict may not generalize to samples of well-functioning, low disagreement families.

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Child-Related Disagreement, Conflict Resolution Strategies and Child Adjustment

Among Families with Toddler and Preschool-Aged Children

The dual income family with children is the norm in Canada (Statistics Canada, 2000a). Because most mothers of young children are employed outside the home, today's fathers, more than ever, must share the responsibilities of caring for children (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; LaRossa, 1988; Lee & Duxbury, 1998; Pleck, 1997). Given that father involvement in family life is related to benefits for all family members, the trend toward *parenting partnerships* is likely to signify a positive change for contemporary families (Bouchard & Lee, 2000; Cabrera et al., 2000; Gottman & Carrère, 1994; Hoffman, 1983; Lamb, 1997; Levy-Shiff, 1994; Pruett, 1987).

Decades of research with mothers and their children have provided strong evidence that family functioning has an important impact on child well-being (Basic Behavioral Task Force for the National Advisory Mental Health Council, 1996; Patterson, 1992; Repetti, Taylor, & Seeman, 2002). However, researchers have begun to recognize the need to include the individual perspectives of fathers, as well as those of mothers, in family research (e.g., Cabrera et al., 2000; Crockenberg & Covey, 1991; Floyd & Zmich, 1991; Frosch & Mangelsdorf, 2001; Margolin, Gordis, & John, 2001; National Institute of Child Health & Human Development, Early Child Care Research Network, 2000; Phares, 1996; Phares & Compas, 1992; Phares & Lum, 1997; Russell & Russell, 1994). The present research was designed to respond to this need by examining the perspectives of both parents.

Psychologists studying children of divorced families have found that marital status is less important to child well-being than is the quality of the relationship between parents (Amato,

2001; Amato & Keith, 1991; Buchanan, Maccoby, & Dornbusch, 1991; Emery, 1982; Kelly, 2000; Kurdek, 1992; Whiteside, 1998). The relationship between two individuals working together in their roles as parents has been referred to as “co-parenting” (McHale & Cowan, 1996). Co-parenting has most often been studied in samples of separated or divorced parents (e.g., Ehrenberg, 1996). It is surprising that co-parenting has been recognized only recently as an important issue in the context of two parent/intact families (for exceptions see Belsky, Crnic, & Gable, 1995; Block, Block, & Morrison, 1981; McBride & Rane, 1998; McHale, 1995).

The transition to parenthood is known to be a challenging time for couples (Cowan & Cowan, 2000). Another challenging period is the developmental period when children begin to experiment with the discovery that they can be independent from parents by asserting their wishes (e.g., saying *no*) and by challenging those of their parents (e.g., temper tantrums). Parent concerns about managing their child’s behaviour peak around age 3 years (Campbell, 2002). The challenges associated with this period may explain why many marriages that end in divorce do so when children are still preschool-aged (Whiteside & Becker, 2000). The couple relationship must be transformed to include a new type of relationship in the formative years of child-rearing: the co-parent relationship. This period is considered by some one of the most important milestones of the family life cycle (Feinberg, 2002).

It is reasonable to assume that if two parents are working together on caring for their children they will have disagreements. More than two-thirds of parents with adolescent children reported that they engage in child-related discussions and a substantial number subsequently have engaged in conflict over these issues (Forehand & McCombs, 1989). However, there are no data describing the frequency of disagreement or conflict over child-related issues in families with

younger children. Given the relative amount of supervision and involvement in daily child care responsibilities required by toddlers and preschool-aged children (Campbell, 1990), there are ample opportunities for parents to disagree. It is important to learn more about how child-related disagreement relates to child adjustment in families with young children. The present study was designed to examine parent ratings of child-related disagreement frequency among community families with toddler and preschool-aged children and to examine its relation with parent ratings of child adjustment.

To address the question as to whether disagreement is associated with child adjustment, the relevant literature is reviewed and studies of the reactions of children to angry interactions involving adults are described. Next, studies of the links between couple conflict and child adjustment are presented. Third, studies of the links between child-related disagreement and child adjustment are reviewed. Finally, studies of the links between strategies used by parents to resolve disagreements (conflict resolution strategies) and both couple and child adjustment are presented. These separate yet interrelated literatures are reviewed in turn.

Although there is a large body of research on marital conflict and child adjustment, the examination of child-related disagreement and its relation to child adjustment is a relatively recent endeavour. Most research has focussed on the relation between *nonchild*-related disagreement or couple/marital conflict and child adjustment (e.g., Katz & Gottman, 1993; Kerig, 1996). Unfortunately, there has been a great deal of ambiguity with respect to the conceptualization of conflict. The term *conflict* has been used to refer to a range of interactions including physical violence, verbal aggression, disagreement, and low marital satisfaction (Fincham, 1994; Grych & Fincham, 2001; Margolin, Oliver & Medina, 2001). Distinctions have

been blurred because authors often use these terms interchangeably and because the findings of research designed to examine one has often been interpreted as being generalizable to the other. Fincham (1998) highlighted the importance of distinguishing between broad band constructs such as couple adjustment/functioning and more specific constructs such as couple satisfaction vs. conflict. He argued that the use of measures designed to examine more specific constructs are likely to provide more information about the links between couple and child functioning than are measures designed to examine broad-band constructs (e.g., couple adjustment). Relatedly, the term conflict has also been used to describe findings from studies that measured both verbal and physical aggression (e.g., Ingoldsby, Shaw, Owens, & Winslow, 1999). The result is that it is difficult to disentangle links that are due to the inclusion vs. exclusion of physical aggression. These ambiguities have led researchers to assume that the mere presence of disagreement between mothers and fathers is a risk factor for child maladjustment and that this risk is evident at all intensities (e.g., Belsky et al., 1995). It is useful to be precise about what is and what is not measured in research designed to examine links between disagreement or conflict and child adjustment. The question as to whether or not any degree of disagreement between mothers and fathers is related to child adjustment is an empirical one that is addressed in the present study.

The now classic study by Block et al. (1981) has frequently been cited as an example of research highlighting the importance of co-parent disagreement. However, Block et al. did not measure co-parent disagreement. These authors measured differences between parents on child-related *attitudes*. There is little evidence that parenting attitudes relate to parenting behaviour (Holden & Edwards, 1989). Therefore, it is necessary that researchers examine disagreement in a methodologically sound way. In the present study, a measure that assesses parent ratings of

frequency of parental disagreement was used.

For the purposes of the following review and of the present study, disagreement refers to the frequency with which mothers and fathers report having verbal disagreements with each other. *Child*-related disagreement is defined as the frequency with which parents report having verbal disagreements with each other about child-related issues and couple or marital disagreement is defined as the frequency with which parents report having verbal disagreements with each other about nonchild-related issues. Finally, conflict is defined as more intense disagreements characterized by negative affect (e.g., escalating anger, distress) and verbally and/or emotionally aggressive behaviour (e.g., yelling, name calling, etc.). The term conflict is used to refer to observational ratings of conflict (e.g., couple interactions about a topic of disagreement) or to parent self-reports about the frequency with which they engage in conflict. Conflict resolution strategies refers to observational ratings of interactions during conflict or to parent ratings about the frequency with which they use different conflict resolution strategies (e.g., Conflict Tactics Scale; Straus, 1979).

As stated earlier, research on co-parenting within two parent families has been based on the assumption that high parental agreement in child-rearing is integral to both the couple relationship and to child well-being. Concerns about children's need for consistency and the negative effects of conflict on children appear to underlie this assumption. For example, Block et al. (1981) suggested that "Contradictory, confusing messages from disagreeing parents stress the child's loyalties and complicate attempts to discern order and predictability in the world" (p. 965).

An alternate perspective views parental disagreement and conflict as normative processes

(e.g., Cummings & Wilson, 1999; Emery, 1992; Katz, Kramer, & Gottman, 1992). For example, it is not the mere occurrence of disagreement that is linked to negative child outcomes, rather, certain properties of parental interactions (e.g., intensity) are risk factors for child difficulties (Cummings & Davies, 1994). In a similar way, marital researchers have found that dyadic adjustment is associated with the strategies that partners use when trying to resolve differences and is less a function of the presence of disagreement or of conflict (e.g., Kerig, 1996; Kurdek, 1994, 1995; Prado & Markman, 1999; Weiss & Heyman, 1990). Disagreement and conflict, therefore, appear to be a normal part of life and their presence is not sufficient in explaining negative adjustment either in children or in couples. On the other hand, the conflict resolution process (e.g., the conflict resolution strategies used during a disagreement) is central to our understanding of couple functioning and is also expected to explain variability in child adjustment (Cummings, Goeke-Morey, & Graham, 2002; Cummings & Wilson, 1999; Markman, 1992).

Marital Conflict and Child Adjustment

Researchers have established that conflict characterized by extreme intensity and severity (e.g., spouse abuse) has a negative impact on adult well-being, the parent-child relationship, and on child adjustment (e.g., Holden & Ritchie, 1991; Jouriles & LeCompte, 1991; Margolin et al, 2001; Rossman & Rosenberg, 1992). More intense couple conflict is positively associated with both immediate negative child reactions (Cummings, Zahn-Waxler & Radke-Yarrow, 1981; 1984) and longer term negative effects (Bradley & Corwyn, 2000; Cummings et al., 1994; Davies & Cummings, 1994; Davis, Hops, Alpert, & Sheeber, 1998; Gonzales, Pitts, Hill, & Roosa, 2000; Grych & Fincham, 1990; Howes & Markman, 1989; Katz & Gottman, 1995; Kerig, 1998;

Tresch Owen & Cox, 1997). This pattern has been found in laboratory studies designed to measure the reactions of children to adult anger and in surveys designed to measure the relation between couple conflict and child adjustment.

Immediate Reactions When Exposed to Adult Conflict

Table 1 provides brief descriptions of the eight studies that examined very young children's immediate reactions to adult conflict. The bulk of this work has been conducted by Cummings and his colleagues. Two samples of children followed longitudinally are the basis of four of the publications described in Table 1. Cummings et al. (1981, 1984) are based on one overlapping sample. Cummings, Iannotti, and Zahn-Waxler (1985) and Cummings (1987) used an overlapping sample but one that is different from the two earlier studies. The remaining four publications are based on separate samples.

In all cases, children were exposed to verbal arguments and in some cases (e.g., Cummings et al., 1985; Cummings, 1987), exposure to anger included one person slamming the door as he/she left. However, none of the studies exposed children to physical aggression. In all but two cases (Cummings et al., 1981; Easterbrooks, Cummings, & Emde, 1994), children in these studies were exposed to anger between strangers, and in one case (Cummings, Vogel et al., 1989) a confederate verbalized anger directed toward the child's mother. Only two studies included fathers; one involved child exposure to mother-father interactions in the laboratory (Easterbrooks et al., 1994) and in the other, mothers rated their child's reactions to conflict in the home. Content of conflict was typically not child-related, although some parent interactions were about child-related issues in one study (Easterbrooks et al., 1994).

Overall, these studies demonstrated that toddlers and preschool-aged children exposed to

simulated or naturally occurring conflict not only discriminate neutral from conflict interactions (e.g., they are more likely to attend to conflict), they also become noticeably distressed and angry themselves both during and following exposure (Cummings, 1987; Cummings et al., 1985; Cummings et al., 1981; 1984; Cummings, Vogel, Cummings, & El-Sheikh, 1989). However, important developmental changes are evident in children's immediate reactions to conflict. Children's repertoires of responses to conflict appear to increase with age (Cummings, 1987). As children approach toddlerhood, they become more likely to involve themselves in adult conflict by attempting to mediate the interaction (Easterbrooks et al., 1994). Mediating behaviour becomes increasingly frequent between the ages of two and five years of age (Cummings, Pellegrini, Notarius, & Cummings, 1989). Children between the ages of two and five years of age show visible signs of distress and anger in response to adult conflict. Furthermore, there is recent evidence that school-aged children are more sensitive to conflict when it occurs among familiar, as opposed to unfamiliar adults (Davies, Myers, Cummings, & Heindell, 1999). Therefore, the association is likely to be strongest in the context of conflict between parents.

It is reasonable to hypothesize that children in whom aggression and distress are more frequently evoked would experience more behaviour problems than would children in whom aggression and distress are less frequently evoked (Davies et al., 1999). Adaptive attempts to deal with such stressors over time can set the stage for coping patterns that are maladaptive and not easily modified later in childhood or in adulthood (Compas, Connor-Smith, Saltzman, Harding Thomsen, & Wadsworth, 2001; Crockenberg & Kirby Forgays, 1996; Crockenberg & Langrock, 2001; Davies & Cummings, 1998; Eisenberg et al., 2001; Ingoldsby et al., 1999).

The four studies that examined the differences between toddler and/or preschool-aged

boys' and girls' reactions to conflict (Cummings, 1987; Cummings et al., 1985; Cummings et al., 1981, 1984) found little evidence of gender differences in emotional reactions. In contrast, studies with families of older children (e.g., Cummings, Vogel et al., 1989; Davies et al., 1999; Garcia O'Hearn, Margolin, & John, 1997; Gordis, Margolin, & John, 1997) have reported gender differences. Some of these findings suggest that boys become more noticeably angry/aggressive than do girls and that girls become more distressed than do boys in reaction to conflict (but see Cummings & Cummings, 1988 and Cummings & Wilson, 1999 for exceptions). The gender intensification hypothesis (Davies et al., 1999) suggests that in the toddler and preschool periods, children's reactions are not differentiated by gender, but that older children may develop a more gender-stereotyped response to conflict as a function of socialization (Crockenberg & Kirby Forgays, 1996; Cummings & Cummings, 1988). However, the role of gender in the relation between marital conflict and child reactions is far from resolved at this time (Davies et al., 1999; Snyder, 1998). In the next section, literature reviews of the relation between conflict and child adjustment in nonexperimental studies are discussed.

Couple Conflict, Child Adjustment and Gender Differences

A meta-analysis of studies examining the relation between marital conflict and child externalizing difficulties among married couples (Reid & Crisafulli, 1990) reported a small mean effect size ($r = .16$). Buehler et al. (1997) found a small to medium effect size of $d = .32$ in a meta-analysis of studies focussing exclusively on parental conflict, excluding studies that used measures of marital satisfaction more generally. These investigators included studies designed to examine this relation among families of school-aged children and adolescents (e.g., aged 5 to 18 years of age). Amato and Keith (1991) reported larger mean effect sizes for the role of conflict

when child adjustment scores of children from high conflict homes were compared to child adjustment scores of children from low conflict homes (e.g., $d = .60$ for externalizing difficulties and $d = .68$ for internalizing difficulties). Some have suggested that Reid and Crisafulli obtained a small effect size because the effect was diluted by including studies that did not directly assess conflict (e.g., Buehler et al., 1997; Emery, 1982; Fincham, 1994; 1998; Fincham & Osborne, 1993). There is evidence to support the superior sensitivity of more specific measures of dyadic or co-parent functioning in studies that show that measures of co-parent interaction account for the relation between global marital adjustment and child adjustment (e.g., Jouriles, Murphy et al., 1991; Mahoney, Jouriles, & Scavone, 1997). The strength of the relation between disagreement and child adjustment is likely to be somewhere between the strength of the relation between couple satisfaction and child adjustment and between couple conflict and child adjustment. The existing studies (e.g., Dadds & Powell, 1991; Jouriles, Murphy et al., 1991) support this estimate.

As experts have noted (e.g., Cummings & Wilson, 1999; Davies et al., 1999; Snyder, 1998), researchers do not yet understand if, and how, gender plays a role in the relation between conflict and child adjustment. The pattern of a stronger relation between conflict and adjustment in boys compared to girls has been more evident in clinic than in community samples (Reid & Crisafulli, 1990). Although early theorizing suggested that gender differences may reflect more frequent exposure to conflict among boys than among girls (Emery, 1982), recent evidence with school-aged children suggests this is not the case (Dadds, Atkinson, Turner, Blums & Lendich, 1999; Kerig, 1998). An alternate hypothesis is that gender differences are likely to emerge over time as a function of socialization (e.g., the gender intensification hypothesis; Crockenberg & Kirby Forgays, 1996; Davies et al., 1999), based on the finding that young children usually do

not differ in terms of internalizing or externalizing behaviour problem scores until they reach early school-age (Keenan & Shaw, 1997; Levy & Fivush, 1993). However, even among families of school-aged children, gender differences in the relation between marital conflict and child adjustment are found inconsistently (e.g., Bickham & Fiese, 1997; Cummings et al., 1994; Cummings & Wilson, 1999; Grych, Seid, & Fincham, 1992; Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Jenkins & Smith, 1991; Jouriles, Bourg & Farris, 1991; Kerig, 1996; 1998). The inconsistent pattern of gender differences may be a result of differences across child age, differences related to parent gender and/or it may be because gender specific mediators and/or moderators have not yet been identified. It is essential that future research adopt a developmentally sensitive design (e.g., focus on different age groups separately), that they include both mothers and fathers, and that they examine potential mediators and/or moderators of the relation between disagreement or conflict and child adjustment separately for families of boys and of girls. The present study was designed to address these issues.

Few studies of the effect of gender have included children under the age of five. In a notable exception, Jouriles, Pfiffner and O'Leary (1988) found that frequency of marital conflict was related to child behaviour difficulties for toddler-aged girls, but not for boys. Studies focussing on child-related disagreement or conflict among families of toddler or preschool-aged children and that are designed to examine gender differences are equally rare (Dadds & Powell, 1991; Mahoney et al., 1997). These included children ranging widely in age, making it impossible to clarify this issue specifically for this age group. Campbell (2002) reported evidence that preschool-aged boys are sometimes, but not always perceived as higher on externalizing behaviour than are girls. Given these inconsistent findings, it is necessary to test for gender

effects before assuming the null hypothesis of no gender differences (e.g., Snyder, 1998). It is particularly important to examine this issue within a homogeneous age group, given the developmental differences characterizing the relation between conflict and child adjustment (Cummings & Davies, 1994).

In summary, toddlers and preschool-aged children become noticeably distressed and angry when exposed to adult conflict in the laboratory (e.g., Cummings et al., 1984; Ballard, El-Sheik, & Lake, 1991). Few studies have examined gender differences in the relation between child-related disagreement or conflict and the adjustment of preschool-aged children. Although there is little support for gender differences in children of this age range, it is premature to assume that toddler and preschool-aged boys and girls have similar reactions to parental child-related conflict. Consequently, the present study was designed to determine whether there are distinct gender-related patterns. In the event that gender moderates the relation between child-related disagreement and child adjustment, subsequent analyses are conducted separately for boys and girls. In the next section, studies demonstrating the importance of child-related issues in the link between co-parent disagreement and child adjustment are reviewed.

Child-Related Disagreement, Conflict and Child Adjustment

Researchers have theorized that conflict that is child-related is more important for children than is general marital conflict (e.g., Goeke-Morey, Cummings, Harold, & Shelton, 2001; Grych & Fincham, 1990). Other researchers have taken this to mean that parental agreement about child-related issues is integral to child well-being (Belsky et al., 1995; Gable, Belsky, & Crnic, 1995; McHale & Cowan, 1996). However, only seven studies have examined child-related disagreement or conflict in toddler and preschool-aged children. Table 2 presents

brief descriptions of each study. Because only two of the seven studies examined preschool-aged children separately, studies of preschool- and school-aged children are included in the table.

Overall, these studies have demonstrated a link between child-related disagreement and child behaviour problems among families of community preschool-aged boys and among clinic- and community school-aged children. Furthermore, among the families of preschool-aged boys, maternal ratings of child-related disagreement explained variance in maternal ratings of child adjustment over and above the effect of marital satisfaction as well as the effect of marital conflict frequency (e.g., Jouriles, Murphy et al., 1991). The link between disagreement and child adjustment was also found among families of both clinic-referred and community children ranging widely in age (e.g., 3-9 years of age; Dadds & Powell, 1991; Mahoney et al., 1997). However, because studies either excluded families of girls (e.g., Ingoldsby et al., 1999; Jouriles, Murphy et al., 1991) or because analyses were conducted including preschool-aged and school-aged children in the same group (e.g., Dadds & Powell, 1991; Mahoney et al., 1997), it is not known whether the link between child-related disagreement and child adjustment is generalizable to community families of toddler or preschool-aged girls. Of the studies that included girls, one compared parent ratings of child-related disagreements for the families of boys and of girls (Dadds & Powell, 1991) and found no gender differences in their sample of families of clinic-referred and community 3 to 8 year old children. The other found that child gender did not moderate the relation between couple variables and child adjustment (Mahoney et al., 1997). Given that the only studies that included the perspectives of fathers included clinic-referred 4- to 9-year-old children (Mahoney et al., 1997), it is unknown whether the relation between child-related disagreement and child adjustment would be found among fathers of community toddler

and preschool-aged children.

Conflict Resolution Strategies

Recently, researchers have also begun to examine the mechanisms/processes involved in the relation between conflict and child adjustment (Cummings & Davies, 2002; Davies et al., 1999; Frosch & Mangelsdorf, 2001). Some of the mechanisms proposed to explain the relation include negative spill-over from the marital to the parent-child relationship (Erel & Burman, 1995; Gable, Belsky, & Crnic, 1992; Gonzales et al., 2000; Harrist & Ainslie, 1998) and the interpretations children make about the meaning of parental conflict for them (Cummings, 1998; Davies & Cummings, 1994; 1998; Fincham, Grych & Osborne, 1994; Grych, Fincham, Jouriles, & McDonald, 2000; Grych, Seid & Fincham, 1992; Jouriles, Spiller, Stephens, McDonald, & Swank, 2000; Rutter, 1994). However, it has been argued that there are likely to be other variables that also contribute to the association between disagreement or conflict and child adjustment (e.g., Emery, Fincham & Cummings, 1992; Fincham et al., 1994; Jenkins & Smith, 1991; Osborne & Fincham, 1996; Tresch Owen & Cox, 1997). The present study was designed to examine the role of conflict resolution strategies on the relation between parent ratings of child-related disagreement and parent ratings of child adjustment.

Conflict resolution strategies include constructive approaches such as positive problem-solving and less positive approaches such as verbal aggression or negative escalation. Positive problem-solving includes listening to the other person, expressing feelings about the issue, and working together to come up with ideas that work well for each person. Verbal aggression or negative escalation is characterized by behaviours that serve to intensify the interaction (e.g., being sarcastic, insulting), and these distinguish nondistressed from distressed couples (Burman,

Margolin & John, 1993). Preliminary research with families with school-aged children suggests that these conflict resolution strategies, occurring in the context of marital conflict, are also related to child functioning (Camara & Resnick, 1989; Crockenberg & Langrock, 2001; Eldridge Marcus, Lindahl, & Malik, 2001; Katz & Gottman, 1993; 1995). A basic assumption is that risk, in terms of compromised child functioning, does not lie with the frequency of co-parent disagreement or conflict per se, but in the processes associated with conflict (Cummings, 1998; Frosch & Mangelsdorf, 2001; Markman, 1992; Rutter, 1994; Steinberg & Avenevoli, 2000). Researchers studying families who have experienced divorce have emphasized that identifying conflict mechanisms/processes that pose a risk to children is a priority (Ehrenberg, 1996; Whiteside, 1998). A similar focus should be extended to children from intact families (Cummings & Davies, 2002). Accordingly, it was hypothesized that, as has been found in separated families (e.g., Camara & Resnick, 1989), in intact families, the strategies parents use to resolve child-related disagreement would mediate the relation between parent ratings of child-related disagreement and child adjustment among families of boys. Furthermore, it was hypothesized that if the link between parent ratings of child-related disagreement and of child adjustment was replicated among families of toddler and preschool-aged girls and among fathers, conflict resolution strategies would also mediate that relation. Both positive problem-solving and verbal aggression strategies were included to address concerns about the predominant focus on negative as opposed to positive constructs in family research (Fincham, 1998).

Recently, researchers have examined how conflict resolution strategies relate to child adjustment among families of school-aged children when the content of conflict reflects couple issues (e.g., Katz & Gottman, 1997; Kerig, 1996). A small minority of these have examined this

relation among families of preschool-aged children (Ingoldsby, et al., 1999; Frosch & Mangelsdorf, 2001). However, there is no research focussing on the links between conflict resolution strategies and child adjustment in the context of disagreement that is child-related. Child-related content is more strongly related to child outcomes than is general marital conflict in samples of children ranging widely in age (Cummings & Davies, 1994), and explains variance in child adjustment over and above the effect of general marital conflict in school-aged children (Mahoney et al., 1997), and in preschool-aged boys (Jouriles, Murphy et al., 1991). Consequently, the present study was designed to explore the relation between child-related disagreement, conflict resolution strategies and child adjustment in the context of low intensity child-related disagreement.

Drawing on the literature on conflict resolution during marital conflict and on the relations between the frequency of both marital and child-related disagreement or conflict with child adjustment, the present study was designed to examine the role of conflict resolution strategies in moderating and/or mediating the relation between frequency of child-related disagreement and child adjustment. The mediator hypothesis predicted that the relation would be accounted for by conflict resolution strategies. The alternative moderator hypothesis predicted that the strength of the relation would change as a function of the conflict resolution strategies parents used. Conflict resolution strategies examined in this study included verbal aggression and positive problem-solving. There is preliminary evidence that use of these conflict resolution strategies during marital conflict is related not only to couple functioning, but also to child adjustment.

Conflict Resolution Strategies and Couple Adjustment

Marital researchers have found that frequency of conflict is less important to couple functioning than is the conflict resolution process (e.g., Kerig, 1996; Kurdek, 1994, 1995; Prado & Markman, 1999; Weiss & Heyman, 1990). Two conflict resolution strategies have been found to be particularly salient including: verbal aggression and positive problem-solving. Verbal aggression, which includes criticism, blaming, and negative affect are related to negative couple adjustment (Fincham, 1998). Levels of verbally aggressive behaviour during couple conflict are negatively associated with dyadic adjustment both concurrently and over time (Christensen & Pasch, 1993; Christensen & Shenk, 1991; Fincham, 1998; Gottman, 1994; Gottman, Coan, Carrere, & Swanson, 1998; Halford, Kelly & Markman, 1997; Karney & Bradbury, 1995; Katz & Gottman, 1993; Kerig, 1996; Kurdek, 1994, 1995; 1998a; 1998b; Markman & Hahlweg, 1993; Noller & Feeney, 1998; Weiss & Heyman, 1997).

A strategy that is associated with positive couple outcomes is positive problem-solving or constructive communication (Cox, Paley, Burchinal, & Payne, 1999; Heavey, Larson, Zumtobel, & Christensen, 1996; Markman, 1984; Noller & Feeney, 1998). The ability to remain focussed on the topic of disagreement, to encourage mutual expression of feelings, to negotiate and compromise about possible solutions to the problem, and to regulate negative affect are essential elements of a constructive problem-solving approach (Fincham, 1998; Gottman, 1994; Heavey et al., 1996; Markman, 1991).

Conflict Resolution Strategies and Child Adjustment

Preliminary research has suggested that both immediate reactions and overall adjustment of school age children are related to conflict resolution strategies used during marital conflict (Buehler et al., 1998; Camara & Resnick, 1989; Crockenberg & Kirby Forgays, 1996;

Crockenberg & Langrock, 2001; Cummings et al., 1991; Cummings et al., 1994; Goodman, Barfoot, Frye, & Belli, 1999; Jenkins, 2000; Kerig, 1996; Webster-Stratton & Hammond, 1999). These studies are described next. Subsequently, two studies that have examined this relation among the families of preschool-aged children are reviewed (Frosch & Mangelsdorf, 2001; Ingoldsby et al., 1999).

Families of school-aged children. Table 3 presents studies designed to examine the relation between conflict resolution strategies and child adjustment among families of school-aged children. None of the studies focussed on conflict resolution strategies in the context of child-related disagreement and none included an analysis to examine conflict resolution strategies as mediators or moderators. Unfortunately, only a minority of publications provide descriptive information about the frequency and/or intensity of conflict (Goodman et al., 1999; Kerig, 1996).

Overall, these studies have provided preliminary evidence, based on findings with samples of school-aged children, for a link between the conflict resolution strategies parents employ to deal with conflict and child adjustment (Camara & Resnick, 1989; Katz & Gottman, 1993; 1995). According to youth reports, conflict resolution strategies account for the link between frequency of marital conflict and youth adjustment (Buehler et al., 1998). According to maternal reports, conflict resolution strategies interact with frequency of conflict as predictors of child problem-solving skills (Goodman et al., 1999). Given that few authors published descriptive information about the intensity of conflict, it is difficult to estimate the generalizability of findings to samples of couples who engage in different intensities of conflict. None of these studies were designed to examine conflict resolution strategies as mediators and/or moderators of the relation between child-related disagreement and child behaviour problems.

Families of preschool-aged children. Table 4 presents studies designed to examine the relation between conflict resolution strategies and child adjustment among families of preschool-aged children. One recent study was designed to examine the relation between conflict resolution strategies used by parents during an interaction about the division of household labour and child adjustment among families with 3-year-old boys and girls. Frosch and Mangelsdorf (2001) found that a composite observational rating that included parental irritation, negative affect, sensitivity and resolution was related to observers' ratings of adjustment in preschool-aged children. However, there were no relations between the composite observational rating of marital conflict behaviour and either mother, father or teacher ratings of child behaviour problems.

Interpretation of results is blurred by the fact that the observational ratings of child adjustment in the study by Frosch and Mangelsdorf were made using a measure designed to assess perceptions of individuals who have an ongoing relationship with the child (e.g., instructions state that the respondent should think about child behaviours in the last month; Conners' Rating Scale; Conners, 1973), yet the rater had been with the children for only 2 hours. Furthermore, the researcher who made these ratings had been in the family home during the 2 hour period to coordinate the recording of the couple and parenting interactions. Although the researcher is reported to not have been in the same room as family members during the recording of couple and parenting interactions, it is possible that even minimal interactions with family members may have biased his/her ratings of the child. Finally, whereas the majority of families in this study were families of first born 3-year-old children, 45% of the target children were second or later born. Accordingly, it may be that in the latter group of families, well-functioning families are over-represented because these families are likely to have worked out most disagreements by

the time the second or third child has arrived whereas those that have not may already have divorced. As such, the base rate of negative conflict interactions may be too low to detect relations with child adjustment. This might explain the lack of relation between conflict behaviour and parent or teacher ratings of child adjustment. Alternative explanations are discussed below.

In a second study, a composite of maternal reports on conflict resolution strategies and child exposure to conflict when their sons were 3 years old were found to moderate the relation between maternal reports of disagreement frequency when their sons were 2 years old and maternal ratings of boys' adjustment when they were 5 years old (Ingoldsby et al., 1999). Specifically, Ingoldsby et al. found that according to mother reports, when negative strategies were often used during couple conflict, sons' behaviour problems were not associated with frequency of conflict. However, when negative strategies were less often used, maternal ratings of sons' behaviour problems were positively related to frequency of conflict. Although Ingoldsby et al. used a measure of child-related disagreement frequency (Child-Related Disagreement Scale; Jouriles, Murphy et al., 1991) as a predictor when sons were two years old, these investigators combined the scores of the measure of child-related disagreement frequency with scores on a measure of child exposure to conflict. In addition, the measure of conflict resolution strategies was added to the study one year after mothers rated frequency of disagreement and it was not explicitly linked to child-related disagreement. As a result, it is unclear whether the relation between child-related disagreement and child adjustment is confounded by the inclusion of the child exposure scale and whether mothers were thinking specifically about child-related disagreements when they rated their use of conflict resolution strategies one year after they

responded to the measure of child-related disagreement. Finally, the measure of conflict resolution strategies mothers responded to included a verbal aggression scale, a physical aggression scale and scales designed to assess the child's exposure to these aggressive strategies. Ingoldsby et al. collapsed across these scales to create an overall measure of verbal/physical aggression strategies and of child exposure. This makes it difficult to distinguish between the effects of these conceptually different constructs.

Although the observational rating of conflict was associated with the observational rating of child adjustment (Frosch & Mangelsdorf, 2001), conflict resolution strategies were associated with parent ratings of child adjustment only when parents rated conflict resolution strategies themselves (Ingoldsby et al., 1999), not when observers rated conflict (Frosch & Mangelsdorf, 2001). That parent self-reports of conflict resolution strategies were associated with child adjustment only when parents themselves reported on their conflict resolution strategies may reflect the presence of a confound, shared method variance. Alternatively it may reflect: 1) problems with the observational rating system used by Frosch and Mangelsdorf, 2) the focus on nonchild-related as opposed to child-related disagreement, 3) the failure to test for pattern differences among the families of boys and of girls, 4) the inclusion of families with older siblings, 5) the lack of specificity accorded to analyses that combined data for mothers and fathers, and/or 6) differences in the intensity of conflict.

Although researchers who have used observational ratings of conflict and focussed on nonchild-related conflict have found associations between conflict and child adjustment (e.g., Katz & Gottman, 1993; 1995), none have focussed exclusively on the families of preschool-aged children. It may be that conflict resolution strategies are less relevant to child adjustment among

families with younger children. However, the findings of Ingoldsby et al. (1999) do not support this interpretation. More research is required to address this question. Frosch and Mangelsdorf may not have found relations between observational ratings of conflict resolution strategies and parent or teacher ratings of child adjustment because they focussed on nonchild-related disagreement. Again, however, although studies with older children do find such patterns in the context of nonchild-related conflict, no other studies have examined this issue exclusively among the families of preschool-aged children. Research is also needed to address this question.

Similarly, future studies are needed to determine whether the lack of a relation between observational ratings of conflict and child adjustment occurred because patterns may have been masked by combining data for families of girls and boys. Although Frosch and Mangelsdorf (2001) tested for child gender differences on independent and dependent variables, they did not test for differences in the pattern of relations (e.g., by testing the interaction between child gender and the independent variable). It is possible that the relation between conflict and child adjustment differs for boys and for girls, regardless of whether there are gender differences on individual variables.

As suggested earlier, because Frosch and Mangelsdorf did not focus exclusively on families within which preschool-aged children were the eldest, it may be that the sample of families that were included were overly representative of well-functioning families. Studies are needed that focus on couples who are co-parenting together for the first time. It is also possible that Frosch and Mangelsdorf did not find relations between conflict resolution strategies and parent or teacher ratings of child adjustment because these investigators collapsed observational ratings across parents (e.g., combined mother and father behaviour ratings). It is argued that

patterns of relations between disagreement, conflict and child adjustment may differ for mothers and fathers. As is the case with child gender, combining data about conflict resolution strategies of mothers and fathers may mask important findings that could only be identified by examining each parent separately. It is crucial that future research examine relations separately for mothers and fathers. Finally, given that the Ingoldsby et al. (1999) sample was described as high risk and used aggressive strategies more frequently than the normative group, it may be that the differences are related to differences in intensity of conflict. Frosch and Mangelsdorf (2001) reported that parent ratings on the CBCL were slightly lower than norms and that couples were well-functioning, with few couples reporting couple distress.

With respect to the moderating effect of conflict resolution strategies on the relation between disagreement and child adjustment, a number of questions also remain. First, it is unclear whether the results of Ingoldsby et al. (1999) generalize to families who do not engage in physically aggressive behaviour given that their measure of conflict resolution strategies included both verbally aggressive and physically aggressive behaviour. Relatedly, both the measure of disagreement frequency and the composite measure of conflict resolution strategies also included scales that assess child exposure to disagreement or to conflict resolution strategies. As a result, it is also unclear whether the findings are associated with the presence of parental disagreement and conflict or with the child's exposure to parental disagreement and conflict. Third, given that families were recruited through programs designed to support low-income families and that the sample was described as high risk, it is also unclear whether results would generalize to middle-high income families and/or to families who are not at risk. Fourth, the measure of conflict resolution strategies was included one year after mothers reported on disagreement/child

exposure frequency and did not include instructions to focus specifically on child-related disagreements. Future studies must focus on conflict resolution strategies tied specifically to child-related disagreement. Finally, the role of conflict resolution strategies as a moderator of the relation between disagreement frequency and child adjustment was not examined from the perspectives of fathers or among families of girls. Research designed to examine these patterns among fathers and among families of girls is needed.

In summary, although there is evidence that conflict resolution strategies are associated with couple relationship functioning and with child adjustment among families of school-aged children, very few studies have examined this question among families of younger children. Furthermore, no study has examined the role of conflict resolution strategies when the focus was explicitly on disagreements that were child-related. Given the importance of child-related content for younger children (e.g., Jouriles, Murphy et al., 1991), it is important to learn more about the relation between strategies used to resolve child-related disagreement and child adjustment in toddler and preschool-aged children. This is the goal of the present study.

Integration of the Literature

A seminal study by Block et al. (1981) demonstrated a link between differences in child-rearing attitudes among parents and child behaviour problems. Many scholars interpreted these findings as evidence for the hypothesis that any disagreement between parents is detrimental to child well-being (e.g., Belsky et al., 1995; McHale & Cowan, 1996). Although relations between the degree to which parents generally support each other in co-parenting and child functioning have been documented (e.g., McHale & Cowan, 1996), these studies included broad measures of partner support that were not designed to exclusively measure disagreement about child-related

issues.

A decade after the publication of the now classic study by Block et al. (1981), research examining children of divorce had provided strong evidence that among families experiencing divorce child adjustment was related not to family status but to the amount of conflict between parents (Amato & Keith, 1991). At the same time, a number of researchers had begun to examine children's reactions to conflict in the laboratory and provided conclusive evidence that children have observable, physiological and emotional reactions when exposed to conflict between adults (Cummings & Davies, 1994). These authors noted that child-related conflict produces particularly distressing reactions and that children under the age of 5 are especially sensitive to parent conflict. A separate body of research demonstrated that parental conflict characterized by extremely negative interactions (e.g., physical abuse) was linked to negative child adjustment (e.g., Holden & Ritchie, 1991). However, little was known about whether less intense forms of disagreement between parents was related to child adjustment. Given the central role of child-related issues in the relation between exposure to conflict and child reactions of distress (Cummings & Davies, 1994), a number of researchers examined the relation between child-related disagreement between parents and child adjustment in intact families. These researchers demonstrated that disagreement about child-related issues was associated negatively with child adjustment among families of both preschool-aged and school-aged children (e.g., Dadds & Powell, 1991; Ingoldsby et al., 1999; Jouriles, Murphy et al., 1991; Mahoney et al., 1997).

In the marital literature, researchers have made remarkable advances in their attempts to understand how interactions in the couple are related to couple adjustment and dissolution, and have found that it is not the mere occurrence of conflict but how it is resolved that has an impact

on couple functioning (e.g., Fincham, 1998; Kurdek, 1995; Prado & Markman, 1999; Weiss & Heyman, 1990). More recently, some researchers have turned their attention toward understanding how behaviours expressed during marital conflict relates to child adjustment. Most of this evidence focusses on families with school-aged children (e.g., Jenkins, 2000; Katz & Gottman, 1997; Kerig, 1996), although there is preliminary evidence that conflict resolution strategies are associated with child adjustment among families of preschool-aged children as well (e.g., Ingoldsby et al., 1999).

Taken together, these different bodies of literature have demonstrated that: a) less supportive co-parent relationships are associated with poorer child functioning (McHale & Cowan, 1996), b) young children experience distress when exposed to conflict between adults, particularly when conflict is about child-related issues (Cummings & Davies, 1994), c) abusive couple interactions are associated with negative child adjustment (Holden & Ritchie, 1991), d) disagreement between parents about child-rearing issues is related to child adjustment (e.g., Jouriles, Murphy et al., 1991), e) couple interactions characterized by more verbal aggression and less positive problem-solving are related to poor couple outcomes (Fincham, 1998), and f) conflict resolution strategies are associated with child adjustment among families of school-aged children (e.g., Kerig, 1996).

What is less clear is whether, in families that are generally well-functioning: a) the relation between child-related disagreement and toddler or preschool-aged child adjustment is the same for fathers as well as mothers, b) the relation between child-related disagreement and toddler or preschool-aged child adjustment is the same for girls as well as boys, c) conflict resolution strategies are related to child adjustment according to the perspective of both mothers

and fathers of toddler and preschool-aged children, d) conflict resolution strategies either explain the relation between child-related disagreement and child adjustment or moderate the relation between child-related disagreement and child adjustment among families of toddler and preschool-aged children. In the following section, theoretical and methodological considerations are discussed.

Theoretical and Methodological Considerations

Given the small number of studies focussing on child-related disagreement or conflict and its resolution, as well as the theoretical and methodological limitations of the studies reviewed, it is difficult to make firm conclusions. Although parental disagreement is theoretically linked to detrimental child well-being (e.g., Belsky et al., 1995; McHale & Cowan, 1996), the studies reviewed were not designed to test this hypothesis. There is a relation between disagreement and child well-being or between conflict and child well-being. However, it is not clear that child difficulties were at a clinical level. Few studies rely on standardized measures of child adjustment which offer the benefits of information about clinically significant child difficulties (e.g., Block et al., 1981; Snyder et al., 1988). The present study was designed to address this issue. Accordingly, a standardized measure of child adjustment with information about clinically significant problems was adopted.

The present review highlighted important developmental differences in the relation between conflict and child functioning. Most studies designed to assess the relation between conflict resolution strategies and child adjustment focussed exclusively on school-aged children (e.g., Camara & Resnick, 1989; Katz & Gottman, 1993; 1995). Given the developmental differences identified, the results reported in studies that focussed on school-aged children can

not be generalized to toddlers and preschool-aged children. Of the studies that focussed exclusively on preschool-aged children and that included measures of conflict resolution strategies, conflict resolution strategies were related to both internalizing and externalizing problems.

A number of other methodological limitations are evident in the literature. First, most researchers included only mothers in their sample (e.g., Jouriles, Murphy et al., 1991) or included both parents but combined scores of mothers and fathers (e.g., Frosch & Mangelsdorf, 2001). Given that differences between mothers and fathers in their experiences/perceptions of the co-parenting relationship (Floyd & Zmich, 1991; Margolin et al., 2001; McHale, Kuersten-Hogan, Lauretti, & Rasmussen, 2000; Russell & Russell, 1994) and of child adjustment (Achenbach, Edelbrock, & Howell, 1987; Tein, Roosa, & Micheals, 1994) are normative, and that the relations between couple functioning and child adjustment may differ as a function of whether mother or father data are used (e.g., Crockenberg & Langrock, 2001; Gonzalez et al., 2000; Katz & Gottman, 1996; Mahoney et al., 1997; McDonald, Jouriles, Norwood, Ware, & Ezell, 2000; McHale & Rasmussen, 1998), ignoring the experience of fathers may mask important family processes. A growing number of family researchers (e.g., Cabrera et al., 2000; Cox & Paley, 1997; Frosch & Mangelsdorf, 2001; Phares, 1996; Phares & Compas, 1992; Phares & Lum, 1997; Snyder, 1998) recommend a multi-informant approach including the perspectives of both mothers and fathers. A particular concern is that attempts to combine mother and father data (e.g., average or composite scores using mother and father reports) yields inaccurate information about the individual experience/perception of each parent (Cox & Paley, 1997). On the other hand, to consider the potential impact of problems related to single-informant bias, the relations

between one parents' report on disagreement or on conflict variables and the other parents' rating of child adjustment were also examined in this study.

Two other important methodological considerations relate to the predominant focus on boys and the relative absence of research designed to examine the mechanisms involved in the relation between disagreement and child adjustment. First, several of the studies reviewed only included families with boys. It is important to examine families with both boys and girls and to examine gender differences with respect to individual variables and with respect to the relation between disagreement and child adjustment.

Second, the relation between child-related disagreement and child adjustment is not well understood. Having established associations between marital and child variables in high intensity samples, researchers have begun to examine the mechanisms that may account for the relation (Frosch & Mangelsdorf, 2001; Steinberg & Avenevoli, 2000). It is important to examine the moderator and the mediator role of conflict resolution styles in the relation between parent ratings of child-related disagreement frequency and parent ratings of child adjustment. To provide a balanced assessment of conflict resolution strategies and to address recent concerns about the need to consider the contribution of both positive and negative constructs (Fincham, 1998; Frosch & Mangelsdorf, 2001), measures of both negative escalation and positive problem-solving are required.

The Present Study

The present study was designed to examine the relation between child-related disagreement and child adjustment from the perspectives of both mothers and fathers in a community sample of families with toddler and preschool-aged girls and boys. To better

understand how each parent views their couple relationship and their child's adjustment, analyses were conducted separately for mothers and fathers. As discussed earlier, grouping children ranging widely in age makes interpretation of findings difficult. In the present sample of toddler-aged and preschool-aged children, it was possible to examine the relation between child-related disagreement and child adjustment in a more homogenous sample of children and to test for gender-related effects using a standardized measure of child adjustment. Data from families with girls and families with boys were analysed together unless it was found that gender moderated the relation between child-related disagreement and child adjustment.

A community sample of mothers and fathers was recruited to determine whether the relation between maternal ratings of child-related disagreement and of child adjustment found by Jouriles, Murphy et al. (1991) is generalizable to well-functioning, low-disagreement co-parents. To obtain a low disagreement, well-functioning sample of couples, parents responded to advertisements that referred only to family relationships, not to disagreement. The advertisements also emphasized that the participation of both parents was required. Given that mothers and fathers who agreed to participate would have had to agree about their involvement in the study, it was hypothesized that couples would be well-functioning and would report low intensity disagreement. Finally, the current study was designed to examine the moderator and/or mediator role of parent ratings of conflict resolution strategies (verbal aggression and positive problem-solving) on the relation between parent ratings of child-related disagreement and parent ratings of child adjustment.

Hypotheses

Child-related disagreement and child adjustment. Based on the findings of Jouriles, Murphy et

al. (1991), it was predicted that parent ratings of frequency of disagreement would be associated with parent ratings of child adjustment among the families of boys. Furthermore, it was hypothesized that the pattern of relations would be extended to the families of girls. Finally, it was hypothesized that the pattern of relations would be extended to relations between paternal ratings of child-related disagreement and paternal ratings of child adjustment.

Mediator hypotheses. According to Baron and Kenny (1986), relations among the predictor, mediator, and criterion variables must be established prior to testing a mediator hypothesis.

Accordingly, the following predictions were made:

First, based on previous findings (e.g., Dadds & Powell, 1991; Jouriles, Murphy et al., 1991), it was predicted that frequency of child-related disagreement would be positively related to child behaviour problem scores. Second, it was predicted that the more parents engaged in child-related disagreement, the more frequently they would report using conflict resolution strategies, in general. Therefore, it was predicted that more frequent child-related disagreement would be associated with more frequent use of both types of conflict resolution strategies (verbal aggression and positive problem-solving). Third, it was predicted that conflict resolution strategies would be related to child adjustment. Specifically, a higher frequency of positive problem-solving was predicted to be inversely related to child behaviour problem scores and a higher frequency of verbal aggression was predicted to be positively associated with child behaviour problem scores. These conditions had to be met before proceeding to test the mediator hypothesis.

The mediational model specified that the strength of the relation between frequency of child-related disagreement and child behaviour problem scores would decrease when frequency

of conflict resolutions strategies were considered (e.g., added to the equation). First, it was predicted that the relation between frequency of child-related disagreement and child behaviour problems would be explained, either in part or in full, by the frequency with which parents used positive problem-solving strategies. This hypothesis would have been supported if the strength of the relation between child-related disagreement and child adjustment decreased after frequency of positive problem-solving strategies was added to the equation.

Second, it was predicted that the relation between frequency of child-related disagreement and child behaviour problems would be explained, either in part or in full, by the frequency with which parents used verbal aggression strategies to resolve child-related disagreement. This hypothesis would have been supported if the strength of the relation between child-related disagreement and child adjustment decreased after frequency of verbal aggression strategies was added to the equation.

Moderator hypotheses. According to Baron and Kenny (1986), a moderational hypothesis is supported when there is a significant interaction effect involving the predictor and the proposed moderator variables in contributing to variance in the criterion variable, over and above the main effects of the predictor and the moderator. First, it was predicted that positive problem-solving strategies would moderate the relation between child-related disagreement and child behaviour problem scores. This hypothesis would have been supported if there was a significant effect for the interaction between child-related disagreement frequency and frequency of positive problem-solving strategies, over and above the main effects of each variable. It was hypothesized that parents who reported a higher frequency of child-related disagreement and also reported a higher frequency of positive problem-solving strategies would describe their children as less

problematic than would parents who also reported high levels of child-related disagreement but who reported using positive problem-solving strategies less frequently.

Second, it was predicted that verbal aggression strategies would moderate the relation between child-related disagreement frequency and child behaviour problem scores. This hypothesis would have been supported if there was a significant effect for the interaction between child-related disagreement frequency and frequency of verbal aggression strategies, over and above the main effects of each variable. It was hypothesized that parents who reported a higher frequency of child-related disagreement and also reported a higher frequency of verbal aggression strategies would describe their children as more problematic than would parents who also reported a high frequency of child-related disagreement but who reported using verbal aggression strategies less frequently.

Method

Participants

A community sample of dual-income couples with toddler and preschool-aged children participated in this study ($N = 112$). Parents were eligible for the study if a) both parents were employed outside the home or were students at least 20 hours per week, b) their eldest child was a toddler or preschool-aged child (18 to 60 months) living with them full-time, and c) their child did not have any significant physical or cognitive disabilities. Dual-income families were recruited because they represent the majority of Canadian families with children (Statistics Canada, 2000a). Furthermore, compared to parents in one income families, mother and father involvement is relatively more comparable in dual-income families, thus increasing the potential for co-parenting interactions (Barnett & Baruch, 1987). Families with toddler and preschool-aged

children were recruited because fathers are more actively involved in parenting as children move out of infancy (Belsky, Rovine, & Fish, 1989) and because this developmental period is highly challenging for most families given that it is characterized by frequent opportunities for parent discipline (Campbell, 1990; 2002; Pope Edwards, 1995). Parents who had a toddler or preschool-aged child and also had an older child living with them were excluded because of concerns that a large proportion of the child-related disagreements are worked out by the time the second child has arrived. However, families with a second child who was younger than the target child were eligible to participate. Finally, parents who were separated or divorced at the time of the study and parents who had a child with physical or cognitive disabilities were excluded because research suggests that these families may differ from other families on some of the dependent variables of interest in this study (Amato & Keith, 1991; Floyd & Zmich, 1991; Ishii-Kuntz & Ihinger-Tallman, 1991; Kurdek & Fine, 1991; Martin & Bumpass, 1989).

Demographic information about fathers and mothers can be found in Table 5 and Table 6, respectively. Approximately half of the families were recruited through advertisements posted in community agencies (e.g., daycare centres, pediatric clinics, community centres, museums, university bulletin boards) and in magazine articles (54.4%). The remainder were recruited at a community-based, family-oriented event.

Compared to the average Canadian dual-income family (average total income = \$78,524; Statistics Canada, 2000b), the families in the present study earned higher incomes (average total income range = \$80,000-99,999). However, their incomes were similar to dual-income families from the metropolitan area from which the majority (88.4%) were recruited (average total income for Ottawa = \$86,182; Statistics Canada, 2000b). As can be seen in Table 5 and Table 6, the most

common occupational category identified by both mothers and fathers was professional. Because of clerical errors, 7% of couples ($n = 8$) were not asked about their ethnicity. Of those asked (93%), most defined their ethnicity as Canadian/Caucasian, with 11.8% of fathers and 11.6% of mothers defining their ethnicity as Canadian/Minority, consistent with categories outlined in Canadian Census data (Statistics Canada, n.d.).

Measures

Child adjustment. Mothers and fathers completed the Child Behavior Checklist (CBCL/2-3; Achenbach, 1992). A copy of the CBCL/2-3 can be found in Appendix A. However, by the time the present study was completed, the CBCL/1.5-5 and its new norms were made available (Achenbach & Rescorla, 2000). Fortunately, it was possible to re-score data using the new norms because only two items had changed from one version to the next (these two items were re-coded as missing data using the new norms). Because the CBCL/1.5-5 is virtually identical to the CBCL/2-3, with the exception of the normative sample used in standardization, the description below is relevant to both. Where relevant, information that is specific to one normative sample or the other is so specified. A copy of the CBCL/1.5-5 can be found in Appendix B.

Both the CBCL/2-3 and the CBCL/1.5-5 are 99 item measures that assess parent perceptions of child adjustment. Respondents are asked to indicate how characteristic each item is of their child while thinking about the child's behaviour over the past two months. The CBCL yields normalized *T* scores for internalizing and for externalizing difficulties in the normal, borderline and clinical range. Respondents need a fifth grade reading skill and average time to complete is 10 minutes.

The CBCL/2-3 was developed to measure child behaviour problems in toddler and

preschool-aged children. A little over one half of the items for the CBCL/2-3 were compiled from items on the child behavior checklist designed for use with older children (CBCL/4-18; Achenbach & Edelbrock, 1983), which were deemed appropriate for younger children. The remainder of the items were created based on interviews with parents of toddlers and preschool-aged children and on research reporting problem issues for this age group. The CBCL/2-3 was normed on a national U.S. sample of 368 two and three-year old children (Achenbach, 1992). The CBCL/1.5-5 was normed on national North American sample of 700 children ranging from 18 to 71 months of age (Achenbach & Rescorla, 2000).

Analyses conducted with normative samples revealed good inter-rater and test-retest reliability (Achenbach, 1992; Achenbach & Rescorla, 2000). Correlations between mother and father reports are typically significant for the CBCL/2-3 (CBCL/2-3 Total $r = .63$ and $.60$ for 2 and 3 year old children, respectively). For the CBCL/1.5-5 inter-rater reliability between parents was found to be similar ($r = .59$ for internalizing, and $r = .67$ for externalizing ratings). Over a one week period, test-retest reliability scores for mother responses on the CBCL/2-3 internalizing and externalizing scales were $.87$ and $.84$, respectively (Achenbach, 1992). Similar results were found for the CBCL/1.5-5. Over an eight day period, mothers test-retest reliability scores were $.90$ for the internalizing scale and $.87$ for the externalizing scale (Achenbach & Rescorla, 2000).

Achenbach (1992; Achenbach & Rescorla, 2000) also provided evidence for the validity of both versions of the CBCL. The scales discriminate between demographically matched referred and nonreferred children. Convergent validity was supported by significant associations with other child behaviour problem measures (Achenbach, 1992). Discriminant validity was supported by nonsignificant associations with measures of cognitive functioning (Achenbach et

al., 1987). In terms of criterion-related or known-groups validity, clinic-referred children score significantly higher on all symptom scales compared to community children matched for age, ethnicity, and SES, and clinical cut-points also discriminate between these two groups. Although children from low SES families score significantly higher on some symptom scales, the magnitude of the effect is small (e.g., 2-4% of variance for the CBCL/2-3; 3% of the variance for the CBCL/1.5-5). Cross-cultural validity of the CBCL/2-3 has also been reported (Koot, Van Den Oord, Verhulst, & Boomsma, 1997). Finally, Achenbach and Rescorla (2000) recently reported that parent ratings of their children at age 2 or 3 years of age were associated with ratings of the same children six years later.

Child-related disagreement. Mothers and fathers responded to the Child-Rearing Disagreements scale (CRD; Jouriles, Murphy et al., 1991). A copy of the CRD can be found in Appendix C. The CRD is a 21-item measure designed to assess perceptions of the frequency with which parents disagree about child-related issues. Items were selected based on interviews with community parents of 3 to 5 year-old boys and reflect common topics of child-rearing disagreement. Although the CRD was initially developed for use with parents of boys, item content is relevant for both boys and girls. Parents indicate the frequency with which they have disagreed with a parenting behaviour their partner engaged in (e.g., babying our child, being too lenient with our child) over the past two months on a Likert-type scale ranging from 1 (*never*) to 6 (*daily*). Authors of the CRD have reported that the scale is internally consistent with a Cronbach's alpha coefficient of .86 (Jouriles, Murphy et al., 1991).

The CRD is inversely related to measures of global marital satisfaction (Short Marital Adjustment Test; Locke & Wallace, 1959: $r = -.57$), and positively related to both general marital

conflict (Disagreement Short Form of The Short Marital Adjustment Test; Locke & Wallace, 1959: $r = .52$) and measures of child exposure to conflict (Exposure to Marital Disagreements; Jouriles, Murphy et al., 1991: $r = .58$ and O'Leary Porter Scale; Porter & O'Leary, 1980: $r = .59$). The CRD was significantly related to CBCL (Achenback & Edelbrock, 1983) externalizing scores (Pearson correlation coefficient = .20) and internalizing scores (Pearson correlation coefficient = .37) among families of 4 to 6 year old boys. Finally, the CRD explains unique variance in child adjustment over and above the effect of general marital variables.

Modifications to the CRD were required for the purposes of this study. First, items that refer to "my son" were changed to be gender neutral (e.g., "my child"). Second, whereas the wording of the original version instructs parents to rate frequency of disagreement over the past six months, parents in the present study were asked to do so based on the past two months to make the time frame consistent with that of the CBCL. The psychometric properties of the modified CRD were examined.

Conflict resolution strategies. To measure conflict resolution strategies, fathers and mothers completed two subscales from the Conflicts and Problem-Solving Scale (CPS; Kerig, 1996). A copy of the CPS can be found in Appendix D. The eight item Verbal Aggression (CPS-VA) subscale of the CPS measures verbally aggressive strategies (e.g., I raise my voice, yell, shout) and the six item Cooperation (CPS-C) subscale of the CPS measures positive problem-solving strategies (e.g., I listen to my partner's point of view). Respondents are asked to indicate the frequency with which they use each strategy during conflict on a Likert-type scale ranging from 0 (*never*) to 3 (*often*). The CPS was theoretically and empirically derived based on the findings of observational research on couple interaction (e.g., Christensen & Heavey, 1990;

Gottman, 1995). Its psychometric properties were examined with a large Canadian sample of parents of school-aged children ($N = 116$). The sample was recruited through the community but advertisements were also placed in community mental health clinics, which may account for the fact that up to 27% of families had been or were currently involved in some form of therapy.

Kerig (1996) reported good internal consistencies for both the CPS-VA scale (.84 for men and .85 for women) and the CPS-C scale (.86 for men and .86 for women). The measure was stable over time, with a median test-retest correlation over three months of .63.

Kerig (1996) reported significant agreement ($p < .001$) between partners' ratings of each other (e.g., husband rating of himself and wife rating of husband) and significant agreement between partners' ratings of their relationship (e.g., correlations between husband and wife use of collaborative strategies). To examine the convergent validity of the CPS, Kerig assessed the relations between CPS subscales and similar subscales from the Conflict Tactics Scales (CTS; Straus, 1979). The CPS-C scale was positively associated with the CTS Reasoning scale ($r = .29$ for women, $r = .36$ for men) and negatively associated with the CTS Verbal Aggression scale ($r = -.41$ for women, $r = -.36$ for men). The CPS-VA scale was positively related to the CTS Verbal Aggression scale ($r = .62$ for women, $r = .73$ for men) and was unrelated to the CTS Reasoning scale. The CPS-C scale contributed significantly to the prediction of individual satisfaction with conflict resolution for both men and women. The two CPS scales were related in expected ways to relationship satisfaction for both men and women. Childrens' ratings of the intensity of parental conflict were inversely related to parent reports of use of positive problem-solving strategies and positively related to parent reports of use of verbal aggression strategies (Kerig, 1996).

Modification of the CPS instructions was necessary to emphasize the focus on child-related disagreement. As a result, the words “child-related” were inserted into the directions. Furthermore, parents were asked to consider conflict resolution strategies over the past 2 months to make the time frame consistent with that of the CBCL. Because of these changes and because the CPS was used to measure frequency of conflict resolution strategies in a sample composed exclusively of parents with preschool-aged children in the present study, the psychometric properties of the CPS subscales were also verified prior to conducting hypothesis testing.

To examine the construct validity of the CPS, a subset of mothers and fathers also completed two scales from the Conflict Resolution Styles Inventory (CRSI; Kurdek, 1994). A copy of the CRSI can be found in Appendix E. The four item Conflict Engagement (CRSI-CE) subscale of the CRSI measures negative escalation behaviours (e.g., exploding and getting out of control) and the four item Positive (CRSI-P) subscale is a measure of constructive problem-solving (e.g., finding alternatives that are acceptable to each of us). Each partner is asked to indicate the frequency with which they use each of four behaviours during conflict on a Likert-type scale ranging from 1 (*never*) to 5 (*always*). The CRSI was theoretically and empirically derived based on the findings of observational research on couple interaction (e.g., Gottman, 1994; Gottman & Krokoff, 1989). Its psychometric properties were examined among couples with preschool-aged and school-aged children (Kurdek, 1994; 1995).

Internal consistency data are available based on a sample of couples with children for the CRSI-NE (.81 for men and .82 for women) and for the CRSI-P (.75 for men and .68 for women). The CRSI is also stable over time with test-retest reliabilities of .50 (CRSI-P for men), .74 (CRSI-NE for men), .73 (CRSI-P for women), and .78 (CRSI-NE for women) in a sample of

parents over a one year period (Kurdek, 1994).

In terms of validity, Kurdek (1994; 1995) examined the concordance between each partner's ratings of each other. The correlation coefficients for the CRSI-NE were significant ($p < .01$) for both men (ranging from $r = .55$ to $.62$) and women ($r = .52$ to $.55$), and there was also significant agreement on the CRSI-P for women ($r = .21$), but not for men (e.g., the correlation coefficient between mother ratings of father's use of positive strategies and fathers' own rating of his use of positive strategies was not significant). Both subscales are related in expected ways to relationship satisfaction (Kansas Marital Satisfaction; Schumm et al., 1986), change in satisfaction over time and to relationship dissolution (Kurdek, 1994; 1995).

For the purposes of the present study, the instructions of the CRSI were modified to emphasize the focus on child-related disagreement. As a result, the words "child-related" were inserted into the directions. Because of this modification, the psychometric properties of the CRSI subscales were also examined.

Demographics. To determine generalizability of results, mothers and fathers were asked to complete a brief measure of demographics including age, gender, income, ethnicity, and years of marriage or cohabitation. The demographic characteristics questionnaire can be found in Appendix F.

Couple functioning. For descriptive purposes and to evaluate the generalizability of the current findings, mothers and fathers provided information about relationship satisfaction by responding to the Dyadic Adjustment Scale (DAS; Spanier, 1976). To minimize item overlap across couple variables, only the 10 item satisfaction subscale of the DAS was used. A copy of the DAS satisfaction subscale can be found in Appendix G. The satisfaction subscale of the

DAS, initially proposed by Kurdek (1992), appears to be an adequate substitute for the full DAS (Hunsley, Pinsent, Lefebvre, James-Tanner, & Vito, 1995). Hunsley et al. reported evidence suggesting that the construct validity of the DAS was conserved using only the satisfaction subscale. The satisfaction subscale is internally consistent with Cronbach's alpha coefficients ranging from .81 to .83 (Hunsley et al., 1995; Kurdek, 1992) and is moderately stable over time. Kurdek (1992) reported test-retest reliability coefficients ranging from .60 (women) to .64 (men) over one year and from .49 (women) to .52 (men) over 3 years. The satisfaction subscale of the DAS was found to account for most of the variance in the relationships between the DAS and other measures of relationship quality and to predict relationship dissolution (Kurdek, 1993; Sabourin, Lussier, Laplante & Wright, 1990; Spanier, 1976). Finally, Hunsley et al. found that the satisfaction scale of the DAS reproduced correlation values obtained with the overall DAS in terms of relationships with other marital measures.

Design and Procedure

Recruitment. To maximize sample size and to ensure as representative a sample as possible, diverse recruitment strategies were employed (Karney et al., 1995; Markman, 1992). Various local community agencies permitted advertisements to be posted. These included daycare centres, pediatric health clinics, family dental clinics, grocery stores, outdoor skating arenas, parent resource centres, indoor play parks, the University of Ottawa campus, and community centres across the Ottawa-Carleton area. The advertisement can be found in Appendix H. To maximize variability in socioeconomic status, specific areas within the city of Ottawa were targeted. A number of families were also recruited through newspaper/magazine advertisements (Today's Parent and Capital Parent). Interested individuals contacted researchers

by telephone. The telephone protocol can be found in Appendix I. Participants received additional information about the study and about participation requirements. Those who were interested and eligible received questionnaire packages in the mail and were asked to return them using postage-paid, self-addressed return envelopes.

Some of the families were recruited when they visited a family-oriented event in the Ottawa area. Parents were given information about the study and those who were eligible and interested provided their names and telephone numbers. Researchers contacted them to obtain mailing addresses. Questionnaire packages were sent by mail and were returned by parents using self-addressed return envelopes.

Procedure. Data were collected between February 2001 and February 2002. Initially during data collection, parents were offered the choice of having a researcher come to their home or work, or meeting a researcher at the University of Ottawa. As most parents opted for a more convenient option, to receive and then return the questionnaires by mail, this strategy was then employed routinely.

Each family received a questionnaire package containing four copies of the consent form; two copies for each parent (one each to keep and one each to return to researchers). A copy of the consent form can be found in Appendix J. The package also contained questionnaires for each parent. Finally, a cover letter emphasizing the importance of independent responding and outlining additional instructions was included in the package. A copy of this letter can be found in Appendix K. The importance of independent responding was also emphasized during the initial telephone contact with parents who agreed to participate. In addition, researchers made a point of emphasizing to parents the importance of each parents' unique perspective on co-

parenting issues to encourage further, independent completion of questionnaires.

Once questionnaires had been returned to researchers, participants received a list of community agencies that provide family services as a reference in case they were experiencing any difficulties at the time of the study. The list can be found in Appendix L. They were also provided with a \$30.00 honorarium and their children received stickers. Questionnaires were returned by mail within an average of 2 weeks for local participants and within an average of 3 weeks for out of province participants.

Participants who did not either contact researchers or return their packages by mail within 2 weeks (or 3 weeks for out of province participants) of having received them received a reminder telephone call. The reminder telephone protocol can be found in Appendix M. At this time, parents were asked whether they had any questions about any of the items and researchers worked with parents to make arrangements for the collection of questionnaires. A second reminder telephone call was made to parents within two weeks of the first reminder.

In total, 168 families requested more information about the study. Of these, 51 families did not meet criteria. Of the 117 eligible families, five (4.27%) initially agreed to participate but did not complete participation. As a result, 95.73% ($N = 112$) of eligible families participated in the present study.

Results

Data Screening

Data were initially screened for accuracy of data entry, missing values, univariate and multivariate outliers, and for violations of assumptions (e.g., normality, linearity, homoscedasticity). None of the variables were highly intercorrelated (e.g., no Pearson

correlation coefficients above .90), so formal tests of collinearity were not required (Tabachnik & Fidell, 2001).

Mothers. For mother data, 7 items had missing values. There were three on the CRD (2.67% of mothers), three on the CPS-C (2.67% of mothers) and one on the CPS-VA (0.89% of mothers). Because the percentage of missing values was low and because there were no differences between mothers who did and did not have missing values, missing items were assigned item means (Tabachnick & Fidell, 2001). Analyses were conducted twice, once with imputed mean values for missing data and once without. The pattern of results was identical. Therefore, all cases were included in the analyses reported. There were five missing item values on the DAS (4.46% of mothers), but values were not replaced because the DAS is used for descriptive purposes only in the present study.

Three variables violated the assumptions of normality. The DAS and the CPS-C were negatively skewed and the CRD was positively skewed. Because the DAS was used for descriptive purposes only, procedures to address violation of assumptions on this variable were not considered necessary. A square root transformation normalized the distribution of CRD scores and a procedure involving reflecting (e.g., all values subtracted from the highest value, plus one) and calculating the log of CPS-C values corrected the normality on the CPS-C. Analyses which included the CRD and the CPS-C were conducted twice, first using the raw scores and then again using the transformed variables. No meaningful differences were found. For this reason and because of concerns over interpretation of transformed data (Tabachnick & Fidell, 2001), analyses using untransformed variables are reported here.

Four univariate outliers, two on the CRD and two on the CPS-C were found in mothers'

responses. To allow retention of deviant cases while minimizing their potential to perturb correlations, they were recoded to z-scores of ± 3 . Recoding eliminated outliers and substantially reduced skewness. To determine the effect of the remaining skewness on results, analyses were repeated with and without recoded variable. No significant differences were found. Therefore, untransformed values are reported for all analyses.

Each of the analyses conducted was also run twice to compare the results between samples that did and did not include multivariate outliers. Multivariate outliers were excluded if they had an impact on the pattern of results. These are described in the description of results with which they are associated.

Fathers. Data from four fathers were excluded from analyses because they provided CBCL/1.5-5 ratings for the wrong child ($n = 2$), failed to respond to several items on the same scale ($n = 1$) or did not complete the measures at all ($n = 1$). Four items had missing values, three on the CRD (2.77% of fathers) and one on the CPS-VA (0.92% of fathers). Missing items were assigned item mean values (Tabachnick & Fidell, 2001). Because the pattern of results was identical whether cases with missing data were retained or excluded, cases with imputed means were retained for all analyses. Although 7 participants had missing item values on the DAS (6.48% of fathers), values were not replaced because the DAS was used for descriptive purposes only in the present study.

Similar to the pattern for mothers, fathers' DAS scores and CPS-C scores were negatively skewed and CRD scores were positively skewed. As reported above for mother data, analyses are reported using untransformed/raw scores because there were no differences in the pattern of results between transformed and raw data.

For fathers, three univariate outliers were identified and recoded to z-scores of ± 3 (CRD = 1; CPS-C = 2). Because there were no differences in the results when univariate outliers were recoded, original values were retained. Similarly, multivariate outliers were retained unless their inclusion led to different results. These are described in the description of results with which they are associated.

Psychometric Properties of Measures

Child behaviour. Means, standard deviations and internal consistency coefficients for the measures used in the present study can be found in Table 7. An examination of means and standard deviations provided in Table 7 indicates that most mothers and fathers rated their children in the nonclinical range on both internalizing and externalizing behaviour problems. Only a small minority of mothers rated their child's behaviour as falling within the borderline/clinical range on the internalizing subscale ($n = 11$; 9.82%) and on the externalizing subscale ($n = 11$; 9.82%). Similarly, very few fathers reported borderline/clinical range internalizing difficulties ($n = 13$; 12.04%) or externalizing difficulties ($n = 10$; 9.26%). Compared to the normative sample, fewer children in the present sample scored in the borderline/clinical range. In the normative sample, 17% and 21% of nonreferred children scored in the borderline/clinical range on externalizing and internalizing scales, respectively (Achenbach & Rescorla, 2000). However, the proportion of toddlers and preschool-aged children rated in the borderline/clinical range in the present sample is similar to community-based prevalence rates summarized by Campbell (8 - 11%; 2002). For example, Lavigne et al. (1996), found that 8.3% of 2 - 5 year old children scored above the 90th percentile on maternal ratings of CBCL/2-3 behaviour problems. The discrepancy between normative data on the CBCL (Achenbach &

Rescorla, 2000) and community based prevalence rates summarized by Campbell (2002) appears to reflect differences in the representation of high risk children as well as the difficulties of accurately distinguishing between behaviour that is disturbed and behaviour that is disturbing to adults in children of this age. Overall, most children in the present sample were perceived by their parents as having no significant behaviour problems.

Child-related disagreement. The means, standard deviations and Cronbach's alpha coefficients for the CRD can be found in Table 7. Internal consistency reliability was very good for mothers and fathers (see Table 7). To determine whether parent CRD frequency ratings were similar to those reported by Jouriles, Murphy et al. (1991), an independent samples *t* test was conducted comparing the mean of the present sample of mothers to the mean of the mothers in the Jouriles, Murphy et al. study. The results indicate that the mothers in the present sample reported significantly less frequent disagreement ($M = 32.5$, $SD = 9.4$) than did those in the Jouriles, Murphy et al. study ($M = 38.5$, $SD = 10.2$), $t(111) = -6.57$, $p < .001$ (two-tailed). Compared to mothers in the Jouriles, Murphy et al. study ($M = 38.5$, $SD = 10.2$), the present sample of fathers also reported significantly less frequent disagreement ($M = 33.1$, $SD = 7.78$), $t(107) = -7.16$, $p < .001$ (two-tailed). The same comparison was conducted with families of boys only given that Jouriles, Murphy et al. included only families of boys. The results were the same. Families of boys in the present study reported significantly less frequent disagreement ($M = 33.9$, $SD = 10.0$) than did families of boys in the Jouriles, Murphy et al. study ($M = 38.5$, $SD = 10.2$), $t(101) = -4.59$, $p < .001$ (two-tailed).

To determine the construct validity of the modified CRD and to verify whether patterns of associations reported by Jouriles, Murphy et al. (1991) were replicated with this sample, Pearson

correlation coefficients between: a) mother and father CRD ratings, b) CRD and child adjustment ratings, and c) CRD and couple satisfaction ratings were examined. Table 8 presents Pearson correlation coefficients between variables and between parents on the same variables for the CRD and for other measures used in this study.

An examination of Table 8 reveals that mother CRD ratings were significantly related to father CRD ratings. Consistent with the findings of Jouriles, Murphy et al., 1991, the CRD was associated with maternal ratings of child internalizing problems and with maternal ratings of child externalizing problems (see Table 8). The same pattern was found among father ratings. Specifically, the CRD was associated with paternal ratings of child internalizing problems and with paternal ratings of child externalizing problems (see Table 8). Finally, the CRD was negatively related to couple satisfaction scores for both mothers and fathers (see Table 8). Overall, in this community sample of families with toddler and preschool-aged children, the psychometric properties of the modified CRD were comparable to those reported by Jouriles, Murphy et al. (1991), and indicate that the measure has similar psychometric properties when applied to fathers as well as to parents of girls.

Conflict resolution strategies. The means, standard deviations and Cronbach's alpha coefficients for the CPS and for the CRSI can be found in Table 7. An examination of Table 7 reveals that internal consistency reliability on both the CPS and the CRSI was good among mothers and fathers in the present sample. Although internal consistency was below the conventional level of .80 on the CRSI-P for mothers in the present sample (.72), it was higher than that reported by Kurdek (.68). Given that the CRSI-P is not the central measure of positive problem-solving for the present study, the concerns raised by the low alpha level are likely to be

more significant in studies using the CRSI-P as the central measure.

To determine whether the frequency with which parents use conflict resolution strategies was similar in the present study compared to previous studies, independent samples *t* tests were conducted comparing the means obtained in the present study with those reported by Kerig (1996) and by Kurdek (1994). Results of *t* tests focussing on the CPS revealed that mothers in the present study reported using positive problem-solving strategies more often than did mothers in Kerig's study ($M = 15.47$, $SD = 2.50$), $t(111) = 12.09$, $p < .001$ (two-tailed) and reported using verbal aggression strategies less often than did mothers in Kerig's study ($M = 12.41$, $SD = 4.61$), $t(111) = -5.08$, $p < .001$ (two-tailed). Similarly, fathers in the present study reported using positive problem-solving strategies more often than did fathers in Kerig's study ($M = 15.00$, $SD = 2.43$), $t(107) = 9.61$, $p < .001$ (two-tailed) and reported using verbal aggression strategies less often than did fathers in Kerig's study ($M = 11$, $SD = 4.53$), $t(107) = -7.04$, $p < .001$ (two-tailed).

With one exception, the pattern of results focussing on the CRSI were the same as was found for the CPS. The results of independent samples *t* tests revealed that mothers in the present study reported using positive problem-solving strategies more often than did mothers in Kurdek's study ($M = 14.43$, $SD = 2.24$), $t(53) = 3.80$, $p < .001$ (two-tailed). Fathers in the present study reported using positive problem-solving strategies more often than did fathers in Kurdek's study ($M = 14.81$, $SD = 2.26$), $t(53) = 2.12$, $p < .05$ (two-tailed) and reported using conflict engagement strategies less often than did fathers in Kurdek's study ($M = 7.70$, $SD = 2.77$), $t(53) = -2.32$, $p < .05$ (two-tailed). However, there was no significant difference between mothers in the present study and those in Kurdek's study on use of conflict engagement strategies ($M = 8.25$, $SD = 2.93$), $t(53) = -.95$, $p > .05$ (two-tailed). In summary, compared to the parents in Kerig's

and in Kurdek's studies, the current sample of parents use verbal aggression strategies less frequently and positive problem-solving strategies more frequently.

To determine the construct validity of the CPS, correlations between: a) the CPS and the CRSI, b) the CPS and couple satisfaction and c) mother and father ratings on CPS scales were examined. Positive associations between parent ratings on scales designed to measure similar constructs (e.g., CPS-C and CRSI-P) provide support for the construct validity of the CPS (see Table 8). Specifically, maternal ratings on CPS-C were positively associated with maternal ratings on CRSI-P and paternal ratings on the CPS-C were positively associated with paternal ratings on the CRSI-P. The CPS-VA was positively associated with the CRSI-NE for both maternal ratings and for paternal ratings.

Inverse relations between scales designed to measure different constructs were also found (e.g., CPS-VA and CRSI-P). As can be seen in Table 8, the CPS-VA was negatively related to the CRSI-P for maternal ratings and paternal ratings. Finally, the CPS-C was negatively related to the CRSI-NE for maternal ratings. Only one correlation was not significant. Paternal ratings on the CPS-C and on the CRSI-NE were unrelated.

The pattern of correlations between the CPS and couple satisfaction also supports the validity of the CPS. As can be seen in Table 8, the CPS-C was positively related to DAS scores for both mothers and fathers and the CPS-VA was negatively related to DAS scores for both mothers and fathers. These findings are consistent with those of Kerig (1996).

Finally, an examination of Table 8 reveals that mothers who reported using positive problem-solving strategies more frequently were more likely to have partners who reported using positive problem-solving strategies more frequently. Similarly, mothers who reported using

verbal aggression strategies more frequently were more likely to have partners who reported using verbal aggression strategies more frequently. Overall, in the present sample of families with toddler and preschool-aged children, the psychometric properties of the CPS were comparable to those reported by Kerig.

Couple satisfaction. To determine whether couple satisfaction scores found in the present sample were similar to those reported by Hunsley et al. (1995) for a community sample, an independent samples *t* test comparing the mean obtained in the present study with the mean obtained by Hunsley et al. was conducted. For this analysis, the mean for the whole sample (e.g., mothers and fathers) was used because Hunsley et al. did not report means and standard deviations separately for men and for women. Results revealed that the DAS scores of participants in the current sample were comparable to those published by Hunsley et al. ($M = 39.4$, $SD = 4.9$), $t(207) = -.79$, $p > .05$ (two-tailed).

Overall, the psychometric properties of the modified scales were replicated in this sample and in some cases, were extended with a novel sample (e.g., fathers and parents of girls in the case of the CRD). Parents in the present sample are similar to couples described by Hunsley et al. (1995) with respect to couple satisfaction. However, in interpreting results of this study, it is important to bear in mind that parents in the present sample reported less frequent child-related disagreement, less frequent use of verbal aggression strategies and more frequent use of positive problem-solving strategies than that reported by other community samples of parents (e.g., Jouriles, Murphy et al., 1991; Kerig, 1996; Kurdek, 1994).

Sample Description

Couple satisfaction. Participants described themselves as generally satisfied with their

couple relationships (see Table 7). Significant associations between mother and father DAS ratings indicates that mothers who reported being satisfied with their couple relationship tended to have husbands who also reported being satisfied with their couple relationship (see Table 8).

Child-related disagreement. Mothers and fathers indicated that they engaged in child-related disagreements occasionally (see Table 7). Mother and father CRD ratings were significantly related (see Table 8).

Conflict resolution strategies. Parents reported that they used positive problem-solving strategies often and that they rarely used verbal aggression strategies (see Table 7). The significant associations between mother and father ratings on the CPS-VA and on the CPS-C indicates that when one parent reported a higher frequency of a given conflict resolution strategy, so did the other (see Table 8). The significant correlations between CRD ratings and CPS ratings indicate that both mothers and fathers who reported more frequent disagreements reported using verbal aggression strategies more often and reported using positive problem-solving strategies less often (see Table 8)

Parent ratings of child behaviour. Mother and father ratings of child behaviour problems were in the nonclinical range (see Table 7). As noted in the method section, the percentage of children perceived as having clinically significant difficulties was comparable to that obtained in previous community samples (Campbell, 2002). As can be seen in Table 8, mother's and father's perceptions of child behaviour were significantly related to each other. To compare between-parent Pearson correlation coefficients obtained in the present study with those obtained in the normative sample, Pearson correlation coefficients were transformed by using the Fisher's r to z transformation procedure and then z scores were compared based on procedures described by

Cohen and Cohen (1983). The results of this comparison indicated that Pearson correlation coefficients obtained in this study were not significantly different from Pearson correlation coefficients obtained in the normative sample for internalizing ($z = .83, p > .05$, two-tailed) or for externalizing ($z = .96, p > .05$, two-tailed).

Taken as a whole, these families are a well-functioning group. They reported being satisfied with the couple relationship, having few child-related disagreements, using verbal aggression strategies infrequently, and using positive problem-solving strategies frequently. Perceptions of parents in this sample also suggest that their toddler and preschool-aged children do not have significant behaviour problems.

Associations Between Mother and Father Reports

In addition to analyses in which the same parent rated both his or her perceptions of disagreement frequency or of conflict resolution strategies as well as his or her perceptions of child behaviour problems, analyses were also conducted examining links between each parent's rating of his or her own perceptions about disagreement and conflict resolution and the other parent's child adjustment rating. None of the correlations was significant among families of boys. Among the families of girls, paternal CRD ratings accounted for 10% of the variance in maternal ratings of girls' externalizing behaviour problems, $r(59) = .32, p < .05$. Furthermore, paternal CPS-VA ratings accounted for 15% of the variance in maternal ratings of girls' internalizing behaviour problems, $r(31) = -.39, p < .05$.

Group Differences

Prior to hypothesis testing, a number of tests of group differences were conducted to assess whether there were differences due to recruitment strategy (e.g., family event vs.

advertisements), parent gender, child age and child gender.

Recruitment group and parent gender. The results of independent t tests used to compare ratings on independent and on dependent variables across recruitment group and across parent gender can be found in Table 9. For recruitment strategy, none of the t tests was significant, indicating that there are no differences on any of the independent or dependent variables as a function of recruitment strategy, therefore it was reasonable to pool data from participants recruited by different methods. Independent groups t tests comparing mother and father responses yielded one difference. Mothers reported using verbal aggression strategies significantly more often than did fathers. The same analysis was conducted separately for families of girls and families of boys. The results indicated that only among families of boys did mothers ($M = 11.35$, $SD = 4.11$) report using verbal aggression strategies significantly more often than did fathers ($M = 8.27$, $SD = 3.62$), $t(99) = 3.99$, $p < .001$ (two-tailed). There was no significant difference in how frequently mothers ($M = 9.67$, $SD = 3.93$) and fathers ($M = 3.66$, $SD = 4.76$) reported using verbal aggression strategies among the families of girls, $t(117) = 1.30$, $p > .05$ (two-tailed).

Child age. To assess the role of child age, a series of oneway analyses of variance (ANOVA) was conducted comparing the ratings of parents with 2-, 3- and 4-year-old children on independent and dependent variables. The results of these ANOVAs can be found in Table 10. As can be seen, there were no significant differences in parent ratings as a function of child age.

Although there were no differences on any variables between families with 2-, 3- and 4-year-old children, it is possible that relations between the CRD and CBCL scores could differ among families of children of different ages. To examine this question, a Hierarchical Multiple Regression (HMR) was conducted with CRD and child age entered first as main effects and with

the interaction of the two entered last. The HMR examining the potential moderating role of child age on the relation between CRD and CBCL scores can be found in Table 11 for mothers and in Table 12 for fathers. As can be seen, the interaction terms were not significant, indicating that child age did not moderate the relation between CRD and CBCL scores. The relation between CRD and CBCL is similar among families of 2-, 3- and 4-year-old children.

Child gender. To examine the possibility of differences on the independent or dependent variables as a function of child gender, independent groups *t* tests were conducted. The results of independent groups *t* tests comparing the families of girls and of boys can be found in Table 13. The results yielded few differences between the families of boys and the families of girls. Mothers of boys ($M = 34.71$, $SD = 11.93$) reported more frequent child-related disagreements than did mothers of girls ($M = 30.86$, $SD = 6.08$), $t(110) = -2.19$, $p < .05$ (two-tailed). Mothers of boys ($M = 11.34$, $SD = 4.10$) also reported more frequent use of verbal aggression strategies than did mothers of girls ($M = 9.67$, $SD = 3.93$), $t(110) = -2.20$, $p < .05$ (two-tailed). Only one difference was found among the responses of fathers. Fathers of sons ($M = 50.77$, $SD = 8.57$) rated their children as significantly higher on externalizing behaviours than did fathers of daughters ($M = 47.45$, $SD = 7.33$), $t(106) = -2.16$, $p < .05$ (two-tailed).

As planned, assessment for differences in *patterns* of relations among families of boys and of girls was conducted, given the inconsistent findings with respect to gender differences reported in the literature (e.g., Cummings & Davies, 2002). To investigate this issue, HMR analyses testing the potential moderating role of child gender on the relation between CRD and CBCL scores were conducted. Because child gender is a categorical variable, a dummy coding scheme was used to produce data amenable to multiple regression analysis (Kerlinger &

Pedhazur, 1973; Pedhazur & Pedhazur Schmelkin, 1991). In the first blocks of the HMR, CRD and child gender were entered as main effects. In the last block, the interaction of the two were entered. HMR results testing for child gender as moderator of the relation between CRD and CBCL scores can be found in Table 14 for mothers and in Table 15 for fathers.

In testing the moderating effect of child gender for mothers, three multivariate outliers were identified and excluded from analyses focussing on externalizing behaviour because of their impact on results. In all three cases, participants reported extremely high scores on CRD, CPS-VA and CBCL-E and extremely low scores on CPS-C and on the DAS. For mothers, the interaction terms were not significant for externalizing or for internalizing scores, indicating that the relation between CRD and CBCL scores was similar for boys and for girls. As a result, hypothesis testing was conducted on the combined sample of mothers of boys and girls.

In testing the moderating role of child gender in the sample of fathers, two multivariate outliers were identified and excluded from analyses focussing on internalizing behaviour because of their impact on results. In both cases, participants reported extremely high scores on CRD and on CBCL-I. For fathers, child gender moderated the relations between CRD and CBCL scores for both internalizing and externalizing dimensions. Given these results, Pearson correlation coefficients between paternal CRD ratings or CPS ratings and paternal CBCL ratings were calculated separately for fathers with girls and fathers with boys. These results can be found in Table 16. An examination of Table 16 indicates that paternal ratings of CRD were unrelated to paternal ratings of their daughters' internalizing or externalizing behaviour problems. For boys, on the other hand, father ratings of CRD were significantly related to paternal ratings of their sons' internalizing as well as externalizing behaviour problems (see Table 16). All hypothesis

testing was conducted separately for father ratings of boys and of girls because child gender moderated the relation between paternal CRD ratings and paternal CBCL ratings.

Mediation Model

To test the mediation model, Standard Multiple Regression (SMR) analyses were conducted, separately for mothers' data and for fathers' data. First, the mediator (CPS) was regressed on the predictor (CRD). Second, the criterion variable (CBCL) was regressed on the predictor (CRD). Third, the criterion variable (CBCL) was regressed on both the predictor (CRD) and the mediator (CPS).

Mothers. Examination of the pattern of correlations provided in Table 8 reveals that although the first two criteria were satisfied, the third criterion required for testing mediation was only satisfied in one case among the responses of mothers. Maternal ratings on the CPS-VA were related to mothers' ratings of child internalizing problems. There were, however, no links between maternal ratings on the CPS-C and mothers' ratings of either internalizing or externalizing problems, and no links between maternal ratings on the CPS-VA and mothers' ratings of externalizing problems (see Table 8). As a result, only the mediator hypothesis with respect to the potential role of CPS-VA as mediator of the relation between CRD and mother ratings of internalizing problems was examined.

The results of the SMR testing the potential mediator role of CPS-VA on the relation between CRD and maternal ratings of internalizing problems can be found in Table 17. As can be seen in Table 17, there are significant relations between the CRD and the CPS-VA (criterion 1) and between the CBCL-I and the CRD (criterion 2). However, although the CPS-VA is significantly associated with CBCL-I scores (see Table 8), this relation is no longer significant

when the CRD is controlled for (see Table 17). Therefore, the hypothesis that verbal aggression strategies mediate the relation between disagreement and child adjustment was not supported for mothers.

Fathers. Given the significant effect of child gender on the relation between disagreement and child adjustment among fathers, mediator tests were conducted separately for boys and girls. An examination of the pattern of correlations provided in Table 16 reveals that among fathers of boys, although the first two criteria were satisfied, the third criterion required for testing mediation was not. Specifically, there were significant relations between the CRD and both the CPS-VA and the CPS-C (criterion 1). There were also significant relations between the CRD and both the CBCL-I and the CBCL-E (criterion 2). There were, however, no links between fathers' internalizing ratings and fathers' ratings of CPS-C or CPS-VA (criterion 3) or between fathers' externalizing ratings and fathers' ratings of CPS-C or CPS-VA (criterion 3). As a result, the hypothesis that conflict resolution strategies mediate the relation between disagreement and child adjustment was not supported for fathers of boys.

An examination of the pattern of correlations provided in Table 16 reveals that among fathers of girls, only the first criterion required for testing mediation was satisfied. Specifically, there were significant relations between the CRD and both the CPS-VA and the CPS-C (criterion 1). There were, however, no links between fathers' CRD ratings and neither the CBCL-I or the CBCL-E (criterion 2). Similarly, there were no links between fathers' internalizing ratings and fathers' ratings on the CPS-C or on the CPS-VA (criterion 3). There were also no links between fathers' externalizing ratings and paternal ratings on the CPS-C or on the CPS-VA (criterion 3). As a result, the hypothesis that conflict resolution strategies mediate the relation between

disagreement and child adjustment was not supported for fathers of girls.

Moderation Model

Given that multicollinearity can be problematic when testing for moderator effects (Holmbeck, 1997), variables were first *centered* as recommended by Aiken and West (1991). This process involves a transformation of scores from their natural form to deviation scores with a mean of zero which has been shown to eliminate multicollinearity effects when testing a moderator effect. Because the results of regression analyses were identical using centered and noncentered values, results reported here are based on analyses using noncentered values.

To demonstrate that a third variable moderates a relation, an interaction between the moderator variable and the predictor variable must be demonstrated (Baron & Kenny, 1986). The moderator model for verbal aggression strategies predicted that verbal aggression moderates the relation between child-related disagreement and child adjustment scores, such that a higher frequency of child-related disagreement would be related to a higher level of child behaviour problems when verbal aggression strategies were used more frequently, but not when they were used less frequently. The moderator model for positive problem-solving predicted that positive problem-solving moderates the relation between child-related disagreement and child behaviour problem scores. This hypothesis predicted that more frequent child-related disagreement would be related to higher child behaviour problem scores when positive problem-solving strategies were used less frequently, but not when they were used more frequently.

To test the moderator hypotheses, HMR analyses were conducted to examine child behaviour problem rating scores separately for mothers and fathers. Among fathers, separate regressions were conducted for fathers of boys and fathers of girls. In each HMR, frequency of

child-related disagreement and conflict resolution strategy ratings were entered before interaction terms.

Mothers. Results of the HMR examining the moderator role of conflict resolution strategies on the relation between disagreement and child adjustment among mothers can be found in Table 18 for internalizing behaviour problem ratings and in Table 19 for externalizing behaviour problem ratings. As can be seen in Table 18, the results did not support the moderator hypothesis for internalizing problems.

For externalizing problems, HMR analyses yielded the same pattern (see Table 19). Specifically, the CRD was the only significant predictor of maternal ratings of externalizing problems. Neither the CPS-C nor the CPS-VA were significant predictors of maternal externalizing problem ratings. Finally, neither of the two interaction terms was significant. As a result, the moderator hypothesis predicting that conflict resolution strategies affect the relation between maternal ratings of disagreement and maternal ratings of child behaviour problem scores was not supported.

Fathers. Two multivariate outliers were identified and excluded from analyses focussing on verbal aggression strategies for fathers of girls because of their impact on the results of HMRs involving both internalizing and externalizing ratings. One participant reported extremely high scores on the CRD and on the CPS-VA and an extremely low score on the CPS-C, and the other reported similarly high scores on the CRD and on the CBCL-E. A third multivariate outlier was excluded from the HMR examining the potential role of CPS-C on the relation between CRD and CBCL-E scores for fathers of girls. This participant reported high CRD and low CPS-C frequencies.

HMR results testing the potential moderator role of conflict resolution strategies on the relation between paternal ratings of disagreement and of internalizing behaviour problems can be found in Table 20 for fathers of girls. As can be seen in Table 20, neither the CRD, the CPS-C or the CPS-VA were significant predictors of girls' internalizing problems either independently or in interaction with each other. As a result, the moderator hypothesis was not supported among fathers with daughters for paternal ratings of internalizing problems.

The HMR results testing the moderator role of conflict resolution strategies on the relation between paternal ratings of disagreement and of externalizing behaviour problems can be found in Table 21 for fathers of girls. As can be seen in Table 21, the pattern of results is similar to that found for paternal ratings of internalizing problems. Specifically, paternal ratings of girls' externalizing problems were not associated with paternal ratings on the CRD, the CPS-C or the CPS-VA either in isolation or in interaction with each other. The moderator hypothesis was therefore, not supported among fathers with daughters for paternal ratings of externalizing problems.

In analyses involving fathers of boys, four different cases were identified as multivariate outliers in analyses focussing on verbal aggression strategies. All four had an impact on the HMR examining externalizing behaviour scores, whereas only two of them had an impact on the HMR examining internalizing behaviour scores. As a result, four and two multivariate outliers were excluded from analyses, respectively. In each case, participants reported extremely high CRD and CBCL scores and three of them also reported extremely high CPS-VA scores.

HMR results testing the potential moderator role of conflict resolution strategies on the relation between disagreement and internalizing behaviour problem ratings can be found in Table

22 for fathers of boys. For paternal ratings of their sons' internalizing problems, there was a significant main effect of CRD but neither the CPS-C nor the CPS-VA were significant predictors of internalizing scores. The CPS-C did not interact with paternal ratings on the CRD in predicting boys' internalizing problems. There was, however, a significant effect for the CRD X CPS-VA interaction, indicating that the relation between paternal ratings of disagreement and paternal ratings of boys' internalizing problems was different depending on the frequency of verbal aggression strategies used by fathers (see Table 22).

The HMR results testing the moderator role of conflict resolution strategies on the relation between disagreement and ratings of externalizing behaviour problems can be found in Table 23 for fathers of boys. For paternal ratings of their sons' externalizing problems, there was a significant main effect of CRD but neither the CPS-C nor the CPS-VA were significantly associated with externalizing scores. The CPS-C did not interact with paternal ratings on the CRD in predicting boys' externalizing problems. There was, however, a significant effect for the CRD X CPS-VA interaction, indicating that the relation between paternal ratings of disagreement and paternal ratings of boys' externalizing problems was different depending on the frequency with which fathers used verbal aggression strategies (see Table 23).

To follow up on the two significant interactions found among paternal ratings involving the CPS-VA, simple regression lines for high versus low levels of CPS-VA were plotted and a slope analysis was conducted (Aiken & West, 1991; Holmbeck, 1997). The unstandardized regression coefficients produced in the final block (e.g., when both main effects and the interaction were entered) were used to calculate the regression lines. Graphical illustration of the role of CPS-VA as a moderator of the relation between disagreement and child adjustment can be

found in Figure 1 for internalizing and in Figure 2 for externalizing behaviour problem ratings.

As can be seen, CPS-VA moderated the relation between father ratings of child-related disagreement and father ratings of child adjustment. However, the pattern was contrary to the pattern predicted by hypotheses. As ratings of frequency of disagreement increased, so child behaviour problem ratings increased among fathers who reported using verbal aggression strategies *less* frequently, compared to fathers who reported using verbal aggression strategies *more* frequently. This pattern was consistent both for internalizing and externalizing behaviour problem ratings (see Figures 1 and 2).

To conduct the slope analysis, high and low values of CPS-VA were calculated by subtracting the value that represents 1 standard deviation above and below the mean, respectively (Holmbeck, 1997). An interaction term including the predictor and the new moderator variable (high CPS-VA, low CPS-VA) was subsequently created. HMR was used to test the significance of the slopes from zero. These results can be found in Table 24 for internalizing behaviour problem ratings and in Table 25 for externalizing behaviour problem ratings. Both low and high CPS-VA regression lines were found to be significantly different from zero, indicating that ratings of frequent disagreement were associated with ratings of higher child behaviour problems for low as well as for high CPS-VA groups. This pattern was replicated for both internalizing and externalizing behaviour problem ratings.

The significance of the distance between the regression lines of low and of high verbal aggression frequency was tested using a procedure known as the Johnson-Neyman technique (Huitema, 1980). This procedure makes it possible to determine whether the difference between the lines is significant at a particular level of the predictor variable. Accordingly, a dummy

variable was created to capture values of CPS-VA considered to be low (dummy code = 0) vs. high (dummy code = 1), and a new CRD variable was computed by selecting a high or a low value of CRD which was then subtracted from original CRD scores. Finally, an interaction term composed of the CPS-VA dummy variable and the new CRD variable was calculated. The results can be found in Table 26 for internalizing and in Table 27 for externalizing behaviour problem ratings. As can be seen, results confirmed what seems obvious by looking at the graphs; the differences between high vs. low CPS-VA regression lines are significant when the frequency of disagreement is higher, but not when it is lower. Regardless of the CRD value selected at the low range, high vs. low CPS-VA groups did not differ from each other. However, within the high CRD range, CPS-VA high vs. low groups were significantly different from each other at or above the CRD value of 32 for externalizing behaviour problem ratings but only at or above the CRD value of 40 for internalizing behaviour problem ratings.

Discussion

In the present study mothers and fathers with an eldest child aged 2 to 5 years of age completed self-report measures of child-related disagreement and of use of verbal aggression and positive problem-solving strategies with respect to child-related disagreement. Mothers and fathers also rated child behaviour problems. Parents who participated reported an average family income that was above the national average but that was comparable to the average income of dual-income families with children in the capital (Statistics Canada, 2000b). The majority of participants identified themselves as Caucasian Canadians.

The discussion is organized to address: 1) the findings with respect to the psychometric properties of measures, 2) the description of the sample, 3) group differences on dependent

and/or independent variables, and 4) the results of analyses of patterns of relations between parents of boys and parents of girls. Subsequently, the discussion focusses on the findings with respect to links 5) between parent ratings of child-related disagreement frequency and of child adjustment, 6) between parent ratings of child-related disagreement frequency and of conflict resolution strategy frequency and 7) between parent ratings of conflict resolution strategy frequency and of child adjustment. The results of mediator and moderator hypothesis tests and of the differential patterns of relations found among mothers and fathers are then discussed. Finally, there is a discussion of strengths, of limitations, and of implications. Throughout the discussion, the findings of the present study are compared to those of previous studies.

Measures

The psychometric properties of the modified scales of child-related disagreement, verbal aggression strategies, and of positive problem-solving strategies were evaluated for mothers and fathers in the present sample. Internal consistency on the modified CRD was good for both mothers and fathers. The validity of the CRD was supported by replicating the association between frequency of disagreement and both child adjustment and couple satisfaction found among mothers (Jouriles, Murphy et al., 1991). These associations were similarly found among father ratings. The psychometric properties of the CRD were therefore, replicated in this present sample of mothers. Furthermore, the results of the present study indicate that the CRD can be used with parents of girls and that it can be used to obtain father perceptions of frequency of conflict.

Although alpha values on the modified CPS were slightly lower in the present sample of parents of toddlers and preschool-aged children than they were reported to be among mothers and

fathers of school-aged children (Kerig, 1996), the removal of outliers yielded alpha coefficients within the acceptable range. The validity of the CPS verbal aggression scale and of the CPS positive problem-solving scale was supported in the present study by replicating associations between CPS scales and couple satisfaction (Kerig, 1996) and by establishing associations between CPS scales and a similar measure of conflict resolution strategies (CRSI; Kurdek, 1994). Overall, the psychometric properties obtained in the present study suggest that the CPS can be used to measure frequency of verbally aggressive strategies and of positive problem-solving strategies among mothers and fathers of toddler and preschool-aged children.

Description of Participants

In this community sample of dual income families with toddler and preschool-aged children, both mother and father ratings of couple satisfaction were within the nondistressed range (Hunsley et al., 1995). Mothers and fathers who reported higher couple satisfaction had partners who also reported higher couple satisfaction, as indicated by the significant association between mother and father couple satisfaction ratings.

Compared to published data on the frequency of child-related disagreement among mothers of preschool-aged boys (Jouriles, Murphy et al., 1991), the present sample reported a lower frequency of child-related disagreement. Mother and father self-reports on child-related disagreement frequency were positively associated, indicating that both perceived a similar frequency of child-related disagreement.

Mothers and fathers reported that they used positive problem-solving strategies often and that they used verbally aggressive strategies rarely. Compared to the findings of Kerig (1996) with a sample of parents of school-aged children, the present sample reported that they used

positive problem-solving strategies more frequently and verbally aggressive strategies less frequently. Mother and father self-reports were positively correlated.

It is possible that parent ratings of child-related disagreement frequency and of verbal aggression frequency are lower and that parent ratings of positive problem-solving frequency are higher than that found in previous studies because of the modifications made to original measures. Specifically, these differences may be due to reducing the time frame from 6 to 2 months on the CRD and/or to the focus on child-related disagreements. The differences on the CPS may also be due to the explicit focus on *child-related* disagreement, rather than the range of possible areas of disagreement in couples (e.g., finances, in-laws, division of labour, etc.). Differences in frequency of child-related disagreement and of conflict resolution strategies may also be due to the focus in the present study on couples who are co-parenting a toddler or preschool-aged child for the first time. Among families with older children (e.g., Kerig, 1996) and/or among couples whose toddler or preschool-aged child may not be their first (e.g., Jouriles, Murphy et al., 1991), it is conceivable that the characteristics of child-related disagreement and of conflict resolution strategies may differ.

Both maternal and paternal ratings of child behaviour problems were comparable to norms reported by Achenbach and Rescorla (2000), with most parents perceiving child behaviour to be within the nonclinical range. Compared to the standardization sample (Achenbach & Rescorla, 2000), fewer parents perceived child behaviour problems in the borderline or clinical range. However, the proportion of parents in the present study who perceived borderline or clinically significant difficulties was comparable to the proportion found in other community studies of families with toddler or preschool-aged children (e.g., Lavigne et al., 1996). The links

between mother and father ratings of internalizing problems and of externalizing problems were similar to those reported by Achenbach and Rescorla (2000).

Overall, mothers and fathers in the present sample described themselves as well-adjusted reporting satisfaction with the couple relationship, infrequent child-related disagreement and infrequent use of verbally aggressive strategies, and frequent use of positive problem-solving strategies. Similarly, they perceived their children to be well-adjusted. Mother and father ratings on all variables were significantly related to each other indicating that there is overlap in how each partner/parent perceives these different aspects of their families. Because the ratings of these parents suggest that they are generally better-adjusted than parents described in previous studies (with the exception of couple satisfaction), the findings of the present study provided preliminary evidence about the mechanisms involved in the relation between child-related disagreement and child adjustment among families characterized by infrequent child-related disagreement and use of verbal aggression and by frequent use of positive problem-solving strategies. Similarly, it was possible to evaluate whether results obtained in previous studies generalize to this well-functioning group. Finally, the inclusion of fathers and of families with girls made it possible to understand these complex relations more fully.

Group Differences

There were no differences on independent or dependent variables as a function of recruitment strategy or child age. Highlighting the importance of considering parent and child gender, there were some important differences on independent and dependent variables as a function of parent and child gender.

Parent gender and verbal aggression. Mothers reported that they used verbal aggression

strategies more often than did fathers. This is consistent with the findings reported by Kerig (1996). Comparisons with samples of families of preschool-aged children are not possible because mother and father ratings on conflict resolution strategies were combined (Frosch & Mangelsdorf, 2001). Given that the relation between maternal ratings of verbal aggression frequency and child adjustment disappeared once maternal ratings of child-related disagreement were taken into account and that maternal ratings of verbal aggression did not mediate or moderate the relation between child-related disagreement and child adjustment among mothers, the finding that mothers reported more frequent use of verbal aggression strategies than did fathers is made less important.

Child gender and maternal ratings of frequency of child-related disagreement. Mothers of boys reported more frequent child-related disagreement than did mothers of girls. Of the studies designed to examine child-related disagreement among a combined sample of families with both preschool-aged and school-aged children (e.g., Dadds & Powell, 1991; Mahoney et al., 1997; Snyder et al., 1988), two tested for child gender differences and neither found significant effects for gender for clinic-referred or for community children (Dadds & Powell, 1991; Mahoney et al., 1997). Given developmental differences between preschool-age and school-aged children, the findings of the present study suggest that child gender differences in maternal ratings of child-related disagreement may have been masked by including mothers of both preschool-aged and school-aged children in previous studies.

It is possible that mothers of toddler and preschool-aged boys report more frequent child-related disagreement than do mothers of toddler and preschool-aged girls because there are more opportunities for disagreement among families of boys (e.g., boys may act out more). Although

there is scant research designed to examine this question among families of toddler or preschool-aged children, most of the research to date indicates that boys and girls in this age group don't differ in terms of internalizing or externalizing behaviour, with only a small minority of studies finding that boys are more often perceived as having more externalizing problems than are girls (Campbell, 2002). An alternate interpretation is that mothers of boys report more frequent child-related disagreement than do mothers of girls because of gender differences in the parent-child relationship. Recent research supports this interpretation. Cox et al. (1999) observed couples during the transition to parenthood and found that although there were no significant differences in infant negativity among infant girls and boys (at age 3 months or at age 12 months) during family interactions, mothers were less sensitive and responsive with boys than they were with girls. A similar pattern was not found among fathers. These findings suggest that there is more likely to be stress on the mother-son relationship than on the mother-daughter relationship in the first year of life. As a result, perhaps mothers of boys perceive their relationship with their sons more negatively and are therefore, more likely to recall a higher frequency of child-related disagreement. This may also explain the difference between ratings of mothers of boys and of girls with respect to frequency of verbal aggression which is discussed next.

Child gender and maternal ratings of verbal aggression. Mothers of boys also reported more frequent use of verbal aggression strategies than did mothers of girls. This finding is inconsistent with those reported by Frosch and Mangelsdorf (2001), who found no differences between parents of 3-year-old boys and girls on observational ratings of marital conflict behaviour. The discrepancy may be a function of differences in the content of disagreement across studies. Participants in the Frosch and Mangelsdorf study were asked to interact about

marital issues (e.g., the distribution of household labour). Alternatively, differences between mothers of girls and of boys in Frosch and Mangelsdorf's study may have been masked by combining observational ratings of mother and father behaviour. Finally, the discrepant findings may simply be due to differences in the perceptions of raters. For example, it is possible that mothers of boys may perceive that they are using verbally aggressive strategies with their partners more often than do mothers of girls, even if an objective observer perceives no such differences.

Child gender and paternal ratings of externalizing problems. Paternal ratings on externalizing problems were higher for boys than for girls. Although there were no significant gender differences on the internalizing or the externalizing scale among children in the normative sample (Achenbach & Rescorla, 2000), there is some evidence, albeit inconsistent, that preschool-aged boys are more likely to be perceived as higher on externalizing behaviours than are girls (Campbell, 2002). A similar pattern was not found among maternal ratings in this study.

Child Gender as Moderator of the Relation Between Ratings of Child-Related Disagreement and Ratings of Child Adjustment

Regardless of whether or not there are gender differences on any particular variable, it is possible that relations between variables differ for boys and for girls. In the present study, child gender moderated the relation between paternal ratings of child-related disagreement and paternal ratings of child adjustment. It did not, however, moderate the relation among mother ratings. Paternal ratings of child-related disagreement were associated with higher paternal ratings of boys' behaviour problems, however paternal ratings of child-related disagreement were not related to paternal ratings of girls' behaviour problems.

These findings can be compared with those of Mahoney et al. (1997) who reported that child gender did not moderate the relation between maternal ratings of child-related disagreement and maternal ratings of child adjustment among mothers of clinic-referred 4- to 9-year-old children. However, Mahoney et al. also found that child gender did not moderate the relation between child-related disagreement and child adjustment according to father ratings. The contradictory findings may be explained by differences between families of school-aged children and families of preschool-aged children and/or for community recruited and clinic-referred samples. Specifically, while the relation between paternal ratings of child-related disagreement and child adjustment may be similar for families of school-aged boys and girls, the findings of the present study suggest that according to fathers, this relation differs for families of toddler and preschool-aged boys and girls.

Child-Related Disagreement and Child Adjustment

The pattern found by Jouriles, Murphy et al. (1991) was replicated in the present low disagreement, well-functioning sample of mothers and their toddler and preschool-aged boys. Specifically, maternal ratings of child-related disagreement were associated with maternal ratings of boys' internalizing and externalizing behaviour problems. Previously, no study had examined the relation between paternal ratings of child-related disagreement and of child adjustment among families of toddler and preschool-aged children. In the present study, the findings of Jouriles, Murphy et al. were extended to fathers and their sons.

This study is the first to demonstrate the link between child-related disagreement and child adjustment among mothers with daughters. This pattern was not found among fathers with daughters. However, maternal ratings of daughters' externalizing problems were higher when

father self-reports of disagreement frequency were higher. These findings demonstrate how different patterns of relations are found depending on who the informant is, and highlight the importance of examining the independent perspectives of mothers and fathers in research on family functioning (e.g., Frosch & Mangelsdorf, 2001; Gonzales et al., 2000; Phares, 1996; Phares & Compas, 1992; Phares & Lum, 1997).

Child-Related Disagreement and Conflict Resolution Strategies

A pattern of more frequent use of negative strategies and less frequent use of positive strategies when frequency of child-related disagreement is higher has been found in studies focussing on families of school-aged children (e.g., Goodman et al., 1999). Such a pattern has also been found based on maternal accounts of disagreement and maternal ratings of preschool-aged boys (Ingoldsby et al., 1999). The present study replicated this pattern for mothers of boys, and extended it to include mothers of daughters, and fathers of toddler and preschool-aged girls and boys. The inverse relation between positive problem-solving strategies and frequency of disagreement as well as the positive relation between verbal aggression strategies and frequency of disagreement suggests that even among low disagreement well-functioning families, when parents disagree more frequently, they are likely to use positive strategies less and negative strategies more frequently.

Conflict Resolution Strategies and Child Adjustment

Positive problem-solving strategies and child adjustment. Contrary to hypotheses, parental ratings of frequency of positive problem-solving were unrelated to ratings of internalizing problems or to externalizing problems for either mothers or fathers. However, these findings are consistent with results reported by Goodman et al. (1999) who found no relation

between parent use of positive problem-solving strategies and child problem-solving skills.

Verbal aggression and child adjustment. Although studies with school-aged children have found that more negative conflict resolution strategies are related to poorer child adjustment (e.g., Buehler et al., 1998; Camara & Resnick, 1989; Crockenberg & Langrock, 2001; Ingoldsby et al., 1999; Jenkins, 2000; Katz & Gottman, 1993; 1995; 1997; Kerig, 1996; Webster-Stratton & Hammond, 1999), the findings of the present study indicate that this pattern may not apply as consistently in well-adjusted families with younger children. Specifically, maternal ratings of verbal aggression frequency were not associated with maternal ratings of child externalizing problems. Similarly, paternal ratings of verbal aggression frequency were not associated with paternal ratings of child internalizing or externalizing problems. However, verbal aggression strategies were related to child adjustment in two cases. Maternal ratings of verbal aggression frequency were associated with maternal ratings of child internalizing problems and paternal ratings of verbal aggression frequency were associated with maternal ratings of daughters' internalizing problems.

The findings of the present study are consistent with the findings of Ingoldsby et al. (1999) who reported a relation between maternal ratings of conflict tactics when their sons were 3-years of age and maternal ratings of sons' internalizing problems when their sons were 5-years of age. Given that Ingoldsby et al. included the physical aggression subscale of the CTS (Straus, 1979) and that their sample was characterized by higher socioeconomic stressors, the present finding contributes to the literature by replicating and extending this pattern among well-adjusted families for mothers and their sons. Furthermore, the present study extends the findings reported by Ingoldsby et al. by also examining the relation between negative strategies (e.g., verbal

aggression) and child adjustment among mothers with daughters and among fathers with both sons and daughters.

That positive problem-solving was not associated with maternal or paternal ratings of child adjustment whereas, in some cases, verbally aggressive strategies were suggests that positive and negative conflict resolution strategies are orthogonal constructs, rather than extremes on a single continuum of positive to negative behaviour in this sample of well-functioning families with toddler and preschool-aged children.

Mediator Model

Mothers. Although maternal reports of child-related disagreement were significantly associated with their child behaviour problem ratings, maternal reports of positive problem-solving strategies were not related to maternal ratings of child internalizing or externalizing problems. Similarly, there was no link between maternal reports of verbal aggression strategies and maternal ratings of child externalizing problems. However, there was a positive correlation between maternal reports of verbal aggression strategies and maternal ratings of their children's internalizing problems. Nonetheless, when frequency of disagreement was taken into account, the link between maternal ratings of their use of verbal aggression strategies and maternal ratings of internalizing problems disappeared. As a result, the hypothesis that conflict resolution strategies mediate the relation between child-related disagreement and child adjustment was not supported among mothers. Maternal ratings of verbal aggression strategies do not explain the relation between maternal ratings of frequency of disagreement and maternal ratings of child internalizing problems.

Fathers. Although father ratings of child-related disagreement were related to paternal

ratings of both internalizing and externalizing problems, their ratings of conflict resolution strategies (positive problem-solving and verbal aggression) were not related to paternal ratings of sons' internalizing or externalizing problems. Among fathers of girls, neither paternal reports of child-related disagreement nor self-reported use of conflict resolution strategies (positive problem-solving or verbal aggression) was associated with fathers' ratings of their daughters' adjustment. As a result, the mediator hypothesis was not supported among fathers and their sons or among fathers and their daughters.

The present study is the first to examine the potential role of conflict resolution strategies as a mediator of the relation between parent ratings of child-related disagreement and parent ratings of child adjustment among families with toddler and preschool-aged boys and girls. These findings provide preliminary evidence that, in well-adjusted families with young children, use of verbally aggressive and of positive problem-solving strategies does not explain the relation between child-related disagreement and child adjustment.

Although studies focussing on families with school-aged children have reported preliminary evidence for a stronger association between conflict resolution strategies and child adjustment than there is between frequency of disagreement or conflict and child adjustment, the results of the present study provide preliminary evidence suggesting that a similar pattern does not apply among well-functioning, low conflict families of toddler and preschool-aged children.

In summary, the present study offers preliminary evidence that parent ratings of positive problem-solving do not mediate the relation between parent ratings of child-related disagreement and parent ratings of child adjustment among families of toddler and preschool-aged children. Similarly, parent ratings of verbal aggression strategies do not mediate this relation. The pattern

of relations found among families of school-aged children do not apply among well-functioning, low disagreement families of toddler and preschool-aged children.

Moderator Model

Mothers. Contrary to hypotheses, there was no evidence that maternal reports of their use of either positive problem-solving or verbal aggression strategies moderated significant relations between child-related disagreement and maternal ratings of behaviour problems. Mothers who reported more frequent child-related disagreement and who also reported higher use of positive problem-solving strategies were *not* more likely to perceive fewer behaviour problems in their children than were mothers who reported using positive problem-solving strategies less frequently. Similarly, mothers who reported more frequent child-related disagreement and who reported using verbal aggression strategies more often were *not* more likely to perceive more behaviour problems in their children than were mothers who reported using verbal aggression strategies less frequently. As a result, the moderator hypothesis was not supported for mothers.

Fathers. A test of whether conflict resolution strategies moderate a link between CRD and ratings of child adjustment indicated that neither positive problem-solving or verbal aggression strategies interacted with child-related disagreement to predict child adjustment among fathers of girls.

Among fathers of sons, positive problem solving strategies did not moderate the significant relations between paternal ratings of child-related disagreement and paternal ratings of boys' adjustment. However, verbal aggression strategies moderated the relations between paternal ratings of child-related disagreement frequency and paternal ratings of boys' internalizing and externalizing problems. Contrary to expectations, fathers who reported a lower

frequency of verbal aggression perceived more behaviour problems in sons when they perceived child-related disagreement with partners to be high. In contrast, fathers who reported a higher frequency of verbal aggression perceived fewer behaviour problems in sons when they perceived child-related disagreement with partners to be high. Thus, the moderator hypothesis received some support among fathers of sons, although the effect was in the opposite direction to that predicted. It is noteworthy that a similar inverse relation was found when the association between paternal ratings of verbal aggression strategies and maternal ratings of girls' internalizing problems was examined.

In summary, the moderator hypothesis that conflict resolution strategies moderate the relation between ratings of child-related disagreement and ratings of child adjustment was not supported for mothers. It was also not supported for fathers of daughters. Only among the ratings of fathers of sons did the moderator hypothesis receive limited support, with fathers who engage in more frequent child-related disagreement perceiving higher internalizing and externalizing problems in their sons when verbal aggression strategies were used less often.

Whereas Ingoldsby et al. (1999) found a significant interaction effect between conflict frequency and conflict resolution strategies in predicting boys' adjustment among mothers, conflict resolution strategies did not moderate the relation between child-related disagreement and child adjustment among mothers in the present sample. The current findings are similar to those of Ingoldsby et al. (1999) in that mothers (in the case of Ingoldsby et al.) and fathers (in the case of the present study) who reported a low frequency of aggressive strategies perceived their sons as having more behaviour problems as frequency of parent-reported disagreement/conflict increased. However, a different pattern emerged for parents who reported a high frequency of

aggressive strategies (mothers in the case of Ingoldsby et al. vs. fathers in the case of the present study).

These differences illustrate, again, how relations between disagreement and child adjustment can differ depending on the rater. However, given that conflict resolution strategies moderated the relation among maternal ratings in Ingoldsby et al.'s (1999) study whereas it did not in the present study suggests that differences between studies are not only due to differences in raters. First, the samples differ. Ingoldsby et al.'s low SES community sample included participants recruited from agencies that provide financial and nutritional support to low-income families. Participant scores were significantly different from norms on conflict resolution strategies (CTS; Strauss, 1979) and on child behaviour problems (CBCL/2-3; Achenbach, 1992). Given that the present sample is characterized by values at the other extreme (e.g., moderate income, low use of verbal aggression, normative level of child behaviour problems), the differences in findings suggest that conflict resolution strategies may be qualitatively different across these two samples (e.g., aggressive strategies may be more aggressive in the sample of Ingoldsby et al. than it is in the present sample). This is supported by the fact that aggressive strategies as measured by Ingoldsby et al. included both verbal and physical aggression items of the CTS (Straus, 1979). One half reported that they used physical aggression toward partners.

The present study differs from Ingoldsby et al. (1999) in other ways as well. First, only families of boys were included in the study by Ingoldsby et al. Second, Ingoldsby et al. combined scores on the frequency of disagreement scale with scores on a measure designed to assess the frequency with which a child is exposed to conflict (Jouriles, Murphy et al., 1991). This makes it difficult to determine whether it is frequency of disagreement or child exposure to conflict that

explains the results. Third, mothers reported on conflict resolution strategies a year after they provided a report about frequency of conflict/child exposure. The measure of conflict resolution strategies (CTS; Straus, 1979) was not modified to reflect interest in conflict resolution strategies used during *child-related* disagreement. As a result, the results of the present study provide specific information about how verbally aggressive strategies influence (or don't influence, in the case of mothers) the relation between child-related disagreement and child adjustment among well-functioning families who have children who do not have significant problems.

The present study further contributes to the literature by examining the perspectives of fathers not only with respect to child adjustment, but also with respect to their perceptions of their own conflict resolution strategies in the context of disagreements about children. Although Ingoldsby et al. (1999) reported that conflict resolution strategies did not moderate the relation between frequency of conflict and child adjustment among fathers, they had only maternal ratings on frequency of conflict (when sons were 2 years of age) and on verbal/physical aggression frequency (when sons were 3 years of age). Paternal ratings were available only for the child adjustment measure.

One other study examined the possibility that conflict resolution strategies moderate the relation between frequency of conflict (marital conflict) and child outcomes (Goodman et al., 1999). However, this study focussed on problem-solving skills in children and their sample was composed of families of school-aged children. As was the case with Ingoldsby et al. (1999), Goodman et al. combined scores from the verbal aggression and the physical aggression subscales of the CTS (Straus, 1979) in measuring conflict resolution strategies. They found a significant interaction between conflict frequency and conflict resolution strategies for mothers

but not for fathers. Maternal reports on frequency of use of reasoning strategies also moderated the relation between maternal reports of conflict frequency and child problem-solving skills such that higher self-reported maternal use of reasoning was positively related to child problem-solving skills only when frequency of conflict was low.

The present study is the first to examine the role of conflict resolution strategies as moderators of the relation between child-related disagreement and child behaviour problems among well-functioning families with toddler and preschool-aged children. Furthermore, the present study contributes to the literature by: a) including the perspectives of both parents on all variables, b) including the families of boys and of girls and examining relations separately as appropriate (e.g., when child gender moderates the relation), c) focussing on low disagreement and low verbal aggression frequency, d) focussing exclusively on verbal and not also on physical aggression strategies, e) focussing exclusively on disagreement and not also on child exposure, and f) focussing exclusively on conflict resolution strategies used during child-related disagreement.

Taken together, the results of the present study demonstrate the complexity of the relation between conflict resolution behaviour among parents and child adjustment. Furthermore, the results provide support for the hypothesis that there are not only child gender differences but also parent gender differences in relations between child-related disagreement, conflict resolution behaviour and child adjustment (e.g., Crockenberg & Langrock, 2001; Dadds & Powell, 1991; Coiro & Emery, 1998; Kerig, 1996; Mangelsdorf, Schoppe, & Buur, 2000). Given that maternal ratings of their use of verbal aggression strategies were associated with maternal ratings of more internalizing behaviour problems whereas paternal ratings of their use of verbal aggression

strategies in the context of frequent child-related disagreement was associated with paternal ratings of fewer behaviour problems, it is likely that different conflict resolution strategies are related to perceptions of child adjustment for mothers and fathers. Next, alternative interpretations of these findings are discussed.

Differential Links Between Verbal Aggression Strategies and Ratings of Child Behaviour for Mothers and Fathers

Fathers' ratings of more frequent use of verbal aggression strategies were associated with father ratings of better child adjustment among sons when child-related disagreement was more frequent and among daughters regardless of child-related disagreement frequency. In contrast, mothers' ratings of more frequent use of verbal aggression strategies were associated with higher maternal ratings of internalizing problems, regardless of maternal ratings of child-related disagreement frequency. In interpreting these findings, methodological and conceptual issues are examined.

The first issue relates to the psychometric properties of the CPS. The construct validity data for the original CPS (Kerig, 1996) were replicated in the present study for both mothers and fathers of toddler and preschool-aged children. Thus, we can have confidence that perceptions of conflict resolution strategies were adequately measured. Furthermore, a predictable pattern of poorer child adjustment in terms of internalizing problems associated with higher use of negative strategies was found among maternal ratings.

As previously discussed, no studies have included paternal ratings of child-related disagreement or of conflict resolution strategies and none have included families of girls. The present findings provide preliminary evidence on paternal perceptions of child-related

disagreement, paternal perceptions of conflict resolution strategies and on the relations among these and paternal ratings of child adjustment for boys and for girls. They demonstrate that relations differ for mothers and fathers.

In addition, compared to previous studies, this sample reported less frequent child-related disagreement (Jouriles, Murphy et al., 1991) and less frequent use of verbal aggression strategies (Kerig, 1996). Similarly, compared to Ingoldsby et al. (1999), the sample in the present study reported a higher family income, includes children perceived by their parents to be well-adjusted and includes parents who perceive themselves as individuals who use verbal aggression strategies infrequently. It is possible, that the use of negative conflict resolution strategies is associated with poorer child adjustment in distressed samples of fathers, but not in high-functioning fathers such as those included in the present study. Patterns obtained with socioeconomically disadvantaged families (e.g., Ingoldsby et al., 1999), who report more frequent child-related disagreement (e.g., Jouriles, Murphy et al., 1991) or who report more frequent use of verbal aggression strategies (e.g., Kerig, 1996), may be very different from those found in the present study. It is also important to recall that measures of conflict resolution strategies included in the present study did not include items that assess physical violence.

The moderator results among fathers are large according to Cohen's effect size definitions (1992). A total of 30% ($r = .55$) of the variance in paternal ratings of sons' internalizing scores and a total of 33% ($r = .57$) of the variance in paternal ratings of sons' externalizing scores are explained by paternal ratings of child-related disagreement and of verbal aggression strategies. However, it is important to recall that most children are rated within the nonclinical range on the CBCL. As a result, the pattern of findings may not be of particular clinical significance.

However, given that the present sample is relatively well-adjusted and that the study of relations between conflict resolution strategies used during child-related conflict and child adjustment among families of toddler or preschool-aged children is a relatively new area (especially among fathers), the pattern of results obtained in this study require replication.

The relation between parental disagreement and child adjustment is often presumed to represent a causal relation, with parent disagreement causing child adjustment difficulties (Cummings & Davies, 1994). A systems perspective reminds us of the bidirectional influences that exist between systems in families and makes it possible to consider a different perspective on the present findings. It is possible that among well-functioning families with young children, an inverse relation between paternal ratings of verbal aggression strategies and paternal ratings of child adjustment suggests that fathers who have children with more behaviour problems try to remain calm in the context of child-related disagreement.

An alternative explanation for the counter-intuitive pattern of findings with respect to paternal ratings of their use of verbal aggression strategies and ratings of child adjustment is that conflict resolution strategies measured in the present study do not include a conflict resolution strategy that is particularly pertinent to children, such as withdrawal. It can be hypothesized that fathers who use verbal aggression strategies less often cope with child-related disagreement by withdrawing. It is possible that in nondistressed families, paternal withdrawal, which is not measured in the present study, has a more negative effect on child adjustment than does raising one's voice or interrupting one's partner, which are verbal aggression behaviours included in the present study. Furthermore, it is possible that in a nondistressed sample, children are perceived as being better adjusted when their fathers use verbal aggression strategies more often because their

fathers remain engaged in the co-parent relationship. This is consistent with the hypothesis that highly negative conflict might be more strongly related to negative child adjustment when the relationship between parents is perceived by the child as being unstable (e.g., Abidin & Bruner, 1995; Cummings & Davies, 1994; McHale, 1995).

Marital researchers have consistently found partner withdrawal to be associated with negative couple outcomes, and some have suggested that withdrawal is the marker representing the final stage of couple dissolution (e.g., Christensen & Heavey, 1993; Christensen & Shenk, 1991; Gottman, 1994; Heavey, Christensen, & Malamuth, 1995; Kerig, 1996; Kurdek, 1994; 1995). Moreover, there is mounting evidence from studies involving families of school-aged children that withdrawal or stonewalling behaviours by parents in the context of couple conflict are associated with negative child adjustment (Buehler et al., 1997; Crockenberg & Langrock, 2001; Cummings, 1998; Katz & Gottman, 1993; 1995; 1997; Kerig, 1996; see Cummings & Davies, 2002 for recent review).

In support of this explanation, Katz and Woodin (2002) recently reported having found that hostile-detachment in marital conflict was associated with the most negative adult and child outcomes. In this study, mothers of 4 and 5 year old children perceived more behaviour problems in their children when parent behaviour during marital conflict was categorised by observers as hostile-detached than when parent behaviour during marital conflict was categorised as hostile only. This is consistent with the hypothesis that detachment may explain the results of the present study.

Other recent studies have shown that in some cases, conflict strategies predicted to be linked to negative effects sometimes produce the opposite effect (Frosch & Mangelsdorf, 2001;

Goodman, et al., 1999). Goodman et al. found that more negative couple conflict (e.g., high aggressiveness and escalation) was associated with poorer problem-solving skills in school-aged children, but this pattern was evident only in the context of more frequent marital conflict (e.g., 6 - 14 times per month). When marital conflict occurred 4 or fewer times per month, more negative conflict behaviour was associated with better problem-solving skills in children.

Frosch and Mangelsdorf (2001) examined the potential moderating role of parenting on the relation between marital conflict and child adjustment in a sample of families with preschool-aged children. These investigators found that the link between parenting and child adjustment was moderated by the degree of negativity of couple interaction. Among couples with more negative couple interactions, there was a positive association between better parenting and child adjustment; in contrast, among families in which couple interactions were less negative, there was an inverse relation between better parenting and child adjustment. The same pattern was found for mothers and fathers. These authors also speculated that withdrawal could possibly explain these counter-intuitive findings, such that couples who were low on negativity in marital conflict may also have been disengaged. However, this question could not be answered because, as is the case in the present study, the construct of withdrawal/disengagement was not measured.

Recent evidence supports the hypothesis that disengagement may be a fruitful avenue for future research on conflict and child adjustment. Cox, Paley, Payne, and Burchinal (2001) examined the association between marital conflict in couples when they were expecting their first child and their parenting behaviour when their child was 3 and 12 months of age. These investigators found that marital withdrawal was a more robust predictor of less sensitive parenting than was hostile marital conflict, especially among fathers. This effect was found even

after parent demographics, parent depressive symptoms and child negativity were taken into account. Among fathers, the interaction of hostile conflict behaviour and withdrawal in the context of marital conflict predicted less sensitive parenting. In other words, fathers who were rated high on marital hostility and on marital withdrawal were more insensitive in parenting their infants than were fathers rated high on marital hostility. A similar pattern was not obtained among mothers. For mothers, marital withdrawal alone was a consistent predictor of parenting sensitivity.

In a recent update on an earlier meta-analysis (Amato & Keith, 1991), Amato (2001) reported that more recent research on children experiencing divorce is finding that it is children whose divorcing parents engage in conflict *less*, and not more frequently who fare the worst. Perhaps Amato's findings suggest that poorer child outcomes can be expected when parents have all but given up on trying to work through conflict. Consistent with this, Feinberg (2002) argued that it is important to distinguish between avoiding destructive conflict and completely withdrawing from interactions. This line of thinking is consistent with the effects found by Cummings and Davies (1994); children are sensitive to the extent to which conflict between parents are or are not resolved, whether resolution occurs in the presence or absence of children and children are also sensitive to nonverbal expression of anger. In a review of studies with children of different ages, Cummings (1998) reported that in addition to verbal and physical aggression, marital withdrawal and nonverbal conflict is perceived as destructive by children, as is evidenced by the self-reports of children who are old enough to verbalize their experience of marital conflict (e.g., 11- and 12-year old children; Goeke-Morey et al., 2001). As a result, it will be important for future studies to measure resolution of conflict as well as

detachment/withdrawal behaviour in the context of parental conflict when studying relations between conflict behaviour and child adjustment.

In summary, the counter-intuitive findings may be explained by a variable that was not measured in this study (paternal withdrawal). Alternatively, a pattern of more frequent use of verbal aggression strategies by fathers associated with better child adjustment may be interpreted as fathers trying to remain calm when they perceive their sons as having more behaviour problems. The different patterns found for mothers and fathers underscores the importance of examining these relations from the perspectives of both mothers and fathers.

Strengths of the Present Study

This study focussed on disagreement that is most strongly related to child adjustment; child-related disagreement (Cummings & Davies, 1994; Jouriles, Murphy et al., 1991). Given that most research examining the relation between conflict and child adjustment and between conflict strategies and child adjustment focus on nonchild-related conflict, the present study provides preliminary information about the relation between conflict and child adjustment in the context of content that is most relevant to children. Specifically, the findings of the present study demonstrate that even in well-adjusted families, the frequency with which parents disagree about child-related issues is associated with child adjustment.

The present study was designed to extend the findings of previous studies by examining the mechanisms believed to be involved in the relation between child-related disagreement and child adjustment among families of toddler and preschool-aged children. The present study is one of the first to examine potential mechanisms involved in the relation between child-related disagreement and child adjustment among families with young children.

An important strength of this study is its emphasis on families who represent the norm; families in which neither parents nor children are distressed. Given that very few studies have examined relations between child-related disagreement and child adjustment and between conflict resolution strategies and child adjustment in community samples of families with toddler and preschool-aged children, the findings of the present study replicate and extend previous findings. Furthermore, although first generation research on the link between parent conflict and child adjustment explored the relation among community and clinical samples, the importance of conducting research designed to examine mechanisms that could explain these relations is arguably as high for community samples as it is for clinical samples (e.g., Zimet & Jacob, 2001). This is particularly important given that relations between co-parent disagreement or conflict and child adjustment are believed to differ among community and clinical samples (Cummings & Davies, 2002).

Given that fathers have become increasingly involved in family life, an important strength of this study is that fathers were included and their perspectives were examined separately from those of their partners (e.g., Cabrera et al., 2000). Early research typically did not include fathers. More recent work found that mothers and fathers perceive family experiences differently and that relations between conflict and child adjustment tends to differ depending on whether mother or father ratings are used (e.g., Margolin et al., 2001; Gonzalez et al., 2000). Independent examination of mother and father data addresses concerns that ignoring the perspectives of fathers may mask important family processes (Crockenberg & Langrock, 2001; Phares, 1996; Phares & Compas, 1992; Phares & Lum, 1997). This study provides preliminary evidence that different processes may explain the relations between child-related disagreement and toddler or

preschool-aged child adjustment among mothers and fathers.

In the present study, an important goal was to include families of girls as well as families of boys. Although there are contradictory findings with respect to gender differences in the relation between co-parent disagreement or conflict and child adjustment (Cummings & Wilson, 1999), prior research has focussed more frequently on samples of boys (e.g., Ingoldsby et al., 1999; Jouriles, Murphy et al., 1991) and studies including boys and girls are rare (notable exceptions include Mahoney et al., 1997; Snyder et al., 1988). Furthermore, no study had examined gender differences in relations between child-related conflict behaviour and child adjustment in community families of toddler and preschool-aged children. Some have argued that during this developmental stage, there should be few gender differences (Crockenberg & Kirby Forgays, 1996; Davies et al., 1999) because such differences are hypothesized to be a function of socialization over time. The inclusion of parents of girls allowed an examination of possible differential patterns in the relations between child-related disagreement and child adjustment.

A sample of couples with an eldest child between the ages of 2 and 5 was selected to examine child-related disagreement and conflict resolution strategies early on in the family life cycle when the frequency of child-parent conflict offers fertile ground for child-related disagreement between parents (e.g., Campbell, 1990; 2002; Pope Edwards, 1995). Selecting families with children in this age range also addresses questions about whether relations found among families of older children generalize to families of younger children. Finally, focussing on families with an eldest child aged 2 to 5 made it possible to produce a cross-sectional snapshot of relations in families at the early stages of negotiating the co-parent relationship. Of the studies that have examined the relation between negative conflict resolution strategies in the context of

marital conflict and child adjustment (Frosch & Mangelsdorf, 2001; Katz & Woodin, 2002), none has focussed exclusively on parents who were co-parenting for the first time.

In addition, by making inclusion criteria narrow with respect to child age, the present study is consistent with a developmentally sensitive approach to studying factors associated with child adjustment. Our understanding of developmental differences is not yet complete. Therefore, a strength of this study is in its focus on a relatively narrow/homogenous age group. Given that no links were found between child age and any of the variables included in this study, we can be confident that the age range was narrow enough.

To address recent concerns that researchers tend to focus only on the negatives (e.g., Cummings, Goeke-Morey, & Graham, 2002; Frosch & Mangelsdorf, 2001), this study included measures of both negative (e.g., verbal aggression) as well as positive problem-solving strategies. Thus, it was possible to determine whether or not positive problem-solving has a less marked effect on the relation between child-related disagreement and child adjustment than does use of verbally aggressive strategies (Davies et al., 1999).

The use of a standardized measure of child adjustment is an important strength. Early studies designed to examine the link between conflict and child adjustment in young children rarely used standardized measures of child adjustment (one notable exception is for maternal ratings of boys in the study by Jouriles, Murphy et al., 1991). Furthermore, although findings with respect to relations between conflict and child adjustment among families of school-aged children suggested that there were gender differences in rates of internalizing and of externalizing behaviour problems, no study had explored this pattern among families of toddler and preschool-aged children using a standardized measure of child adjustment. The inclusion of

the CBCL in this study, with its clinical cut-offs and normative data, made it possible to determine whether the relation between conflict and child adjustment has meaningful implications for clinically significant internalizing or externalizing behaviour problems in a community sample of families. It also made it possible to explore differences in relations between parental conflict behaviour and both internalizing and externalizing ratings of boys and of girls. Notwithstanding these strengths, there are a number of limitations characterizing this study.

Limitations and Directions for Future Research

With both individual conflict behaviour and child adjustment ratings made by the same respondent, it is likely that at least some proportion of relations found is due to the individual bias respondents bring to both measures (Reid & Crissafulli, 1990). However, how parents perceive themselves and their child is considered to be information that is invaluable, providing researchers as well as clinicians with each family members' experience in the family (Mangelsdorf et al., 2000). Fincham (1998) argued for example, that parent perceptions may be more strongly related to child adjustment than objective ratings given that parent perceptions include information about the personal meaning of interactions. In the present study, agreement between mothers and fathers on independent and on dependent variables suggest that there was similarity in how each parent perceived conflict and child adjustment. Finally, to address concerns over shared method variance, between parent associations on independent and dependent variables were examined. This made it possible to examine how one parent's self-reported behaviour during child-related disagreement related to the other parent's rating of their child's adjustment.

In future studies, the reports of others (e.g., partner or objective observer) on the individual's behaviour in the context of child-related disagreement should be examined in relation to maternal and paternal ratings of child adjustment. A study that includes both parent perceptions of their behaviour and observer ratings would allow for the comparison of self-report and objective ratings on the relation between conflict resolution strategies and child adjustment. Similarly, this problem could be addressed by seeking child adjustment ratings from alternative caregivers as well as parents. Unfortunately, although research including the perspectives of older children has provided invaluable information about the relation between conflict and child adjustment (Cummings & Wilson, 1999; Davies & Cummings, 1998; Grych & Cardoza-Fernandes, 2001), obtaining the perspectives of children themselves would be difficult for children in this age range (Jouriles, Murphy et al., 2000).

Self-selection in research is a common concern (Costigan & Cox, 2001). It is likely that many families experiencing clinically significant problems are less likely to want to participate in studies and that the most distressed families did not meet criteria (e.g., most families experiencing divorce include a child under age 6; Whiteside & Becker, 2000). Some researchers have suggested that relying on well-adjusted samples that include participants who engage in conflict very infrequently may provide little insight into relations between conflict and child adjustment (Davies et al., 1999). However, the present study focussed on the lower intensity construct of disagreement, which has been linked to child adjustment (e.g., Jouriles, Murphy et al., 1991). The results of this study demonstrate that even when child-related disagreement is infrequent, links between disagreement and child adjustment are replicated. Furthermore, information about the mechanisms involved in the relation between child-related disagreement

and child adjustment are viewed as important for all families, not only those experiencing significant individual or dyadic distress.

The findings of the present study are generalizable to dual-income families with young children who earn an average income and who are well-functioning. Socioeconomic status is particularly important given that social adversity is linked to child adjustment (Boyle, 2002; Bradley & Corwyn, 2002; Duncan, Strycker, Duncan, & Okut, 2002; Leinonen, Solantus, & Punamaeki, 2002; Linver, Brooks-Gunn, & Kohen, 2002) and that families dealing with poverty were not well represented in the present study. The generalizability of the present findings to other family types is unknown. For example, families that include a step-parent and families with gay or lesbian parents may differ from those in the present study on child-related disagreement or on conflict resolution behaviour (e.g., Ackerman, D'Eramo, Umylny, Schultz, & Izard, 2001; Buchanan & Heiges, 2001; Dunn, Davies, O'Connor, & Sturgess, 2001; Fine, 2001; Nixon & Cummings, 1999; Patterson, 2002). Similarly, there is evidence that families coping with disabilities (e.g., Ager & O'May, 2001; Hogan & Msall, 2002; Park, Turnbull, & Turnbull, 2002), differ from families who are not faced with such challenges. Furthermore, most research on relations between disagreement or conflict and child adjustment has focussed on Caucasian parents. The present study is no exception given that only a minority of families who volunteered identified themselves as belonging to an ethnic minority group (11.8% of fathers; 11.6% of mothers). Given that preliminary research indicates that family functioning is characterized by important differences as a function of ethnicity (Cartlegde, Kea, & Simmons-Reed, 2002; Coatsworth et al., 2002; Feldman, Masalha, & Nadam, 2001; Gonzales et al., 2000; McLoyd, Harper, & Copeland, 2001; Ortega, 2001), the results of this study cannot be generalized to

families from different cultures. The findings of the present study can also not be generalized to families coping with distress among individuals (e.g., child, adult) or in relationships (e.g., marital distress), given that differences between clinic and community samples on the relation between disagreement or conflict and child adjustment are expected (Cummings & Davies, 1994). Relatedly, the present study focusses on disagreement and on verbal aggression, not on physical aggression. As a result, the findings cannot be assumed to generalize to families where there is violence (Cummings, 1998; Grych, Jouriles, et al., 2000; Grych, Wachsmuth-Schlaefel, & Klockow, 2002; Jouriles, Murphy et al., 2000; Ware et al., 2001). Future research is needed to examine relations between child-related disagreement, conflict resolution strategies and child adjustment among these diverse family types. Finally, although the findings cannot be generalized to families with older children, they can be considered as a starting point to inform hypotheses about how parental conflict behaviours might related to child adjustment across time.

Although it is recognized that what is needed at this point are comprehensive studies designed to compare the roles of several potential mechanisms on the relation between child-related disagreement and child adjustment (Cummings, Goeke-Morey, & Dukewich, 2001), no study can include all possible variables of interest. This study included only a limited number of variables hypothesized to be the most fruitful avenues to include. However, in the complex relation between co-parent disagreement and child adjustment, there are likely to be numerous mechanisms and pathways (Cummings & Davies, 2002; Zimet & Jacob, 2001). Furthermore, it is likely that relations between conflict resolution strategies and child adjustment will differ depending on which conflict resolution strategy is being examined (Gonzales et al., 2000).

With respect to predictor variables, one important limitation of the present study was that

no measure of couple detachment/withdrawal was included. Although a number of observational coding systems are available for rating couple interactions, self-report measures are needed to obtain the perspectives of parents on withdrawal behaviour. Those that exist (e.g., Kerig, 1996; Kurdek, 1994) have inadequate internal consistency. It will be important for future researchers to develop a psychometrically sound self-report measure of partner detachment so that its potential role in mediating and/or moderating the relation between parental disagreement or conflict and child adjustment can be examined from the perspectives of each parent. This is especially important given recent findings that suggest withdrawal/detachment is more predictive of child adjustment difficulties than is hostility alone (e.g., Katz & Woodin, 2002). The emotional security hypothesis predicts that, if withdrawal is in fact the early marker of relationship dissolution, it would have a stronger relation to child adjustment than would verbal aggression because it signifies that one or the other partner is no longer engaged. It has been suggested that for community families of toddler and preschool-aged children, children may be perceived by their fathers as more well-adjusted when fathers report high use of verbal aggression strategies because compared to fathers who report low use of verbal aggression strategies, fathers who use verbal aggression strategies more may be those who remain engaged in the co-parent relationship.

The correlational design of the present study makes it impossible to determine whether child-related disagreement and child adjustment are causally related among families of toddler and preschool-aged children. It is impossible to determine, for instance, whether it is that a) boys are less likely to develop behaviour problems when fathers use verbal aggression strategies more often during child-related disagreements, or b) fathers are more likely to stay calm (less likely to

use verbal aggression strategies) in the context of child-related disagreements when they perceive their sons to have more behaviour problems. Only longitudinal research can address questions of causality. Notwithstanding the limitations of the present study, a number of implications can be drawn.

Theoretical Implications

The consistency hypothesis. The consistency hypothesis states that co-parent agreement is integral to child well being and co-parent disagreement is theoretically linked to poor child adjustment (e.g., Belsky et al., 1995; Block et al., 1981; McHale & Cowan, 1996). On the other hand, everyday experience tells us that parents never agree about everything all of the time. Some have argued that co-parent disagreement and conflict should be viewed as normative processes and that, as such, they are not predicted to be associated with detrimental child adjustment in most cases (Cummings & Davies, 1994; Cummings & Wilson, 1999; Emery, 1992). In the present study, the findings provide some support for the consistency hypothesis, but it also provides some support for the normative perspective on co-parent disagreement.

Although the relation between child-related disagreement and child adjustment found in previous studies (e.g., Ingoldsby et al., 1999; Jouriles, Murphy et al., 1991) was replicated and extended in the present sample of well-adjusted, low-disagreement co-parents of toddler and preschool-aged children, there is no evidence that more frequent disagreement is associated with clinically significant child behaviour problems. The consistency hypothesis is supported in that this relation was found even among families in a low risk community sample. However, the proportion of children with parent ratings of child behaviour problems in the borderline/clinical range was not higher than that represented in normative data (Achenbach & Rescorla, 2000) and

was similar to data provided by available research on the prevalence of clinically significant distress in children of the same age (e.g., Campbell, 2002). Therefore, although parent ratings of more frequent child-related disagreement are associated with parent ratings of more child behaviour problems, among well-adjusted families of toddler and preschool-aged children, parent ratings of disagreement frequency are not associated with parent perceptions of clinically significant child behaviour problems.

The emotional security hypothesis. The emotional security hypothesis predicts that children become distressed only when co-parent disagreement or conflict causes concern about the viability of the family unit (Cummings & Davies, 1994). In other words, if children fear that something bad will happen to their family as a result of the disagreement (e.g., daddy will have to go away) which, in turn has implications for the child's sense of security (e.g., who will give me hugs if daddy is gone and mommy is always crying?), then children will become distressed themselves. Consistent with the emotional security hypothesis, it was hypothesized that the more parents used verbal aggression, the more children would be distressed which would be evidenced by a positive relation between parent ratings of verbal aggression frequency and parent ratings of child behaviour problems.

The positive relation between maternal ratings of verbal aggression frequency and maternal ratings of child internalizing problems provides some support for the emotional security hypothesis. However, when parent ratings of verbal aggression frequency were examined from the perspective of fathers, the opposite effect was found. Specifically, paternal ratings of more frequent verbal aggression were associated with lower maternal ratings of girls' internalizing problems. The same counter-intuitive finding was obtained when the moderator hypothesis was

examined; paternal ratings of boys' internalizing and externalizing problems were lower when fathers reported more frequent use of verbal aggression in the context of more frequent child-related disagreement. The direction of the relationship between verbal aggression and child behaviour problems among fathers seems to contradict the tenets of the emotional security hypothesis. However, as has been discussed, children whose fathers reported more frequent use of verbal aggression strategies may have been perceived as being more well-adjusted than children whose fathers reported less frequent use of verbal aggression strategies because fathers who reported more frequent use of verbal aggression strategies may also be more engaged/less withdrawn from the co-parent relationship than are fathers who reported less frequent use of verbal aggression strategies. This hypothesis will require further study and if true, it would provide support for the emotional security hypothesis. However, as it stands, although some support was found for the emotional security hypothesis according to maternal ratings, according to paternal ratings the emotional security hypothesis received no support.

The emotional security hypothesis also leads to the prediction that children whose parents use positive problem-solving more often would be more well-adjusted than would children whose parents use positive problem-solving less often because use of effective strategies is assumed to help children feel secure (e.g., disagreement is resolved in a calm and respectful manner). No support was found for this hypothesis. Parent ratings of positive problem-solving were not associated with parent ratings of child adjustment.

The modelling hypothesis. Another perspective on the relation between co-parent interactions and child adjustment is that, when handled appropriately, some co-parent disagreement interactions may actually benefit children in that parents can be seen as models of

how to address differences (Cummings & Davies, 1994). According to the modelling hypothesis, children whose parents use more verbally aggressive strategies, for example, should themselves engage in more aggressive behaviour (e.g., higher scores on the externalizing scale). This hypothesis was not supported in the present sample of well-adjusted, low-disagreement families with toddler and preschool-aged children. In fact, the only cases in which relations between parent ratings of verbal aggression frequency and parent ratings of child behaviour problems were significant involved the internalizing, and not the externalizing scale of the CBCL (paternal ratings of verbal aggression frequency associated with maternal ratings of daughters' internalizing problems; maternal ratings of verbal aggression frequency associated with maternal ratings of child internalizing problems). Neither maternal nor paternal ratings of child externalizing problems were associated with parent ratings of verbal aggression frequency.

According to the modelling hypothesis, it would also be predicted that children of parents who use positive problem-solving strategies more often would be more well-adjusted than would children of parents who use positive problem-strategies less often. No support was found for this hypothesis. Parent ratings of positive problem-solving were not associated with parent ratings of child behaviour problems according to mothers and fathers.

Research Implications

The findings have implications for the utility of measures in future studies because their psychometric properties were replicated and extended in the present study. First, the present findings support the use of the Child-Related Disagreement scale (Jouriles, Murphy et al., 1991) with fathers of toddler and preschool-aged children and with families of toddler and preschool-aged girls. Similarly, evidence for the reliability and validity of the Conflicts and Problem-

Solving scale (Kerig, 1996) was obtained in the present study with families of toddler and preschool-aged children. As a result, its use with mothers and fathers of young children is substantiated.

Future studies are required to further examine the differential links found among mothers and fathers and to examine the hypothesized role of father withdrawal/detachment in explaining the counter-intuitive findings obtained in this study. There appears to be some merit to the newly proposed idea that the relation between disagreement or conflict and child adjustment may differ not only as a function of child gender, but also as a function of parent gender (e.g., Crockenberg & Langrock, 2001). Perhaps child gender had an inconsistent effect in previous studies designed to examine the relation between conflict and child adjustment because parent gender was not also examined. It is imperative that future studies include fathers to allow continued elaboration of our understanding of the differential links between disagreement or conflict and child adjustment.

Future studies designed to elaborate understanding of the complex relations between disagreement and child adjustment must also include the construct of withdrawal. Although Cox et al. (2001) propose that withdrawal may have a stronger effect on children indirectly (e.g., via its' impact on parenting) than directly, this hypothesis has not yet been examined. Given recent findings highlighting the implications of withdrawal for child adjustment, particularly among fathers and when in combination with dyadic hostility (e.g., Cox et al., 2001; Katz & Woodin, 2002), a study that examines the relations among disagreement, conflict resolution strategies, parenting and child adjustment is urgently needed. Furthermore, additional attention must be focussed on measurement, on sampling and on ensuring a developmental and gender sensitive approach to research in this area. These issues are discussed next.

Although psychometrically sound rating scales are available to measure detachment during observations of dyadic interactions, the psychometric properties of self-report measures of detachment are less well-established (e.g., Kerig, 1996; Kurdek, 1994) or do not focus exclusively on individual behaviour (e.g., include two-part/interactional items; Christensen & Sullaway, 1984), thereby making it difficult to examine relations separately for mothers and fathers. There is an urgent need to develop a psychometrically sound self-report measure of withdrawal that is validated by its association with observational ratings of withdrawal.

Additional considerations for future research are that more developmentally sensitive (e.g., that do not include children from different developmental stages unless sample sizes are large enough to examine the effect of developmental stage) studies are needed, as are studies that are sensitive to parent as well as to child gender. Cox et al. (2001) have noted that an important limitation of the literature on the relations between couple and child adjustment is that it is predominantly focussed on clinical samples and on samples of families with school-age children. Research designed to examine the immediate reactions of children when exposed to adult anger in the laboratory are the exception (e.g., a large number of studies have focussed on community samples). Focussing on clinical samples makes it difficult to address gaps in understanding about causality (e.g., problems are pre-existing) and provides information that may not necessarily apply to most families (Zimet & Jacob, 2001). Furthermore, many studies combine families of both preschool-aged and school-age children but do not include samples that are large enough to examine differential links for boys and girls of different ages (e.g., Block et al., 1981). Given that patterns found among samples of school-aged children were not replicated in the present study and that there are developmental differences in children's reactions to conflict (e.g., Cummings

& Davies, 1994), it is suggested that complex relations among disagreement, conflict resolution strategies and child adjustment may be different among samples of families with children of different ages.

Relatedly, paradigms similar to those of Cox and colleagues which are designed to examine the longitudinal associations between pre-child couple functioning and post-child family relationships are urgently required. This would provide information about the nature of relations, which is urgently needed both to inform theory, research and clinical practice. Ideally, longitudinal research would follow a large community sample of families from the transition to parenthood into adolescence in order to better understand normative and problematic trajectories and to identify possible sleeper effects (e.g., problems that may not appear until adolescence). Similarly, it should be possible to continue to measure disagreement, conflict resolution strategies, parenting and child adjustment among many families who go on to be divorced co-parents.

Finally, one of the most important contributions of the present study is that it demonstrates the complexity of the relation between disagreement and child adjustment by reporting the findings based on both mother and father perceptions and based on the reports of parents of both boys and girls. The inconsistent pattern of findings with respect to child gender may be better understood by using a developmentally sensitive approach and by conducting more studies that examine not only bivariate relations between disagreement or conflict and child adjustment, but also multivariate relations designed to examine gender-specific mechanisms of this relation. Relatedly, future studies must stop ignoring the role of fathers in family functioning. The findings of the present study demonstrate that relations found among mother-child constructs

are not necessarily the same among father-child constructs. Including fathers may also clear up some of the ambiguities with respect to child gender, given that some studies with older children are finding idiosyncratic differences in relations between parent and child adjustment depending on whether relations between mother-daughter, mother-son, father-daughter, or father-son are examined (Mangelsdorf et al., 2000; Zimet & Jacob, 2001).

In summary, a longitudinal design recruiting community families at the time of transition to parenthood and following them into adolescence could lead to a better understanding of how normative and dysfunctional family relationships develop. Such a design would allow researchers to not only pinpoint an initial causal direction, but would also allow for the study of bi-directional influences that are likely to develop over time. The perspectives of both mothers and fathers should be obtained at all measurement points. To allow for examination of gender effects, large and equal numbers of families with boys and with girls should be included. The use of observational rating scales to measure conflict resolution strategies and parenting of mothers and fathers would provide important information about how perceptions of parents relate to those of objective observers and also would provide a multi-method approach to evaluating the complex relations among disagreement, conflict resolution strategies, parenting and child functioning. An approach that is designed to examine change over time both in terms of bivariate and multivariate relations is recommended. For instance, it would be possible to examine whether earlier couple interactions (e.g., hostility, withdrawal) have a more robust relation with child adjustment when examined as main effects or in combination with parenting. Similarly, it would be possible to examine the mechanisms that might explain relations (e.g., a hostility-withdrawal style might mediate both the relation between disagreement and child adjustment and the relation

between disagreement, parenting and child adjustment).

Practice Implications

The practice implications of the present findings include the need to recognize that there are both similarities and differences between mothers and fathers (and that both are equally important) and that there are both similarities and differences between boys and girls. Similarly, relations between parent ratings of verbal aggression frequency and parent ratings of child behaviour problems differed for mothers and fathers. These findings suggest that different behaviours may be more or less important depending on whether the parent is the mother or the father and depending on whether the child is a boy or a girl.

On the other hand, parents may benefit from being informed that researchers are beginning to understand differences between mothers and fathers, boys and girls, with respect to these relationships. Specifically, it would be helpful to tell parents that although there are parent and child gender differences, at least among well-adjusted, low disagreement families, neither mothers or fathers need to worry that one way is the right way and the other wrong. This is likely especially important information for fathers who may have a more ambiguous conceptualization of the co-parent role than mothers. Professionals involved in service delivery of pre-natal courses are well-positioned to relay this information. Perhaps parents would be less likely to concern themselves with their different approaches to co-parenting, and relatedly, perhaps they might even disagree less, if they were warned that mother-father differences are normative and are well-tolerated by most children.

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Table 1

Toddler and Preschool-Aged Children's Immediate Reactions to Exposure to Adult Conflict

Study & sample	Context/Rater	Findings
Cummings et al. (1981) . Community (boys=11, girls=13) . Toddlers	Natural/Mother	Distress and aggressive reactions more likely in NOC than in SC and than in CI No gender differences
Cummings et al. (1984) . Community (boys=10, girls=12) . Toddlers-School-age	Natural/Observer	Distress and aggressive reactions were the most frequent among toddlers Distress and aggressive reactions was less frequent 4 years later (age 6-7) No gender differences
Cummings et al. (1985) . Community (boys=26, girls=21) . Toddlers	Lab/Observer	Distress and aggressive reactions observed during conflict, not during CI No gender differences
Cummings (1987) . Community (boys=54, girls=51) . Toddler & Preschool-Aged	Lab/Observer	Distress and aggressive reactions observed during conflict, not during CI 4-5 yr old children more distressed than when they were 2 yrs No gender differences
Cummings, Pellegrini et al. (1989) . Community (boys=24, girls=24) . Toddler & Preschool-Aged	Lab/Observer	All children were more likely to attend, show distress & attempt to mediate during conflict, but not during CI or apology conditions Frequency of mediating behaviours increased with age

(Table 1 continues)

Table 1

Toddler and Preschool-Aged Children's Immediate Reactions to Exposure to Adult Conflict

Study & sample	Context/Rater	Findings
Cummings, Vogel et al. (1989) . Community (boys=60, girls=60) . Preschool-Age & school-age	Lab/Observer	Compared to CI and resolved conflict conditions, children reported stronger distress in conflict and in unresolved conflict conditions Distress during resolved conflict decreased with age but increased with age for unresolved increased
Cummings et al. (1991) . Community (boys=48, girls=50) . Preschool-Age & school-age	Lab/Observer	Compared to older children, preschool-aged children reported highest distress in response to conflict and distress was rarely reported by children of increasing age
Easterbrooks et al. (1994) . Community (boys=15, girls=15) . Toddlers	Lab/Observer	Higher distress was related to more negative parent interactions More frequent mediating behaviour was related to more negative parent interactions

Note. NOC = naturally occurring conflict; SC = simulated conflict; CI = casual interactions.

Table 2

The Relation Between Child-Related Disagreement and Child Adjustment in Toddler and Preschool-Aged Children

Study & sample	Construct/Rater	Findings
Block et al. (1981) . Community . boys=46, girls=54 . Preschool-age & school-age	CBP/caregiver Attitude differences/ parents	Larger differences in parenting attitudes were related to under-control in boys and over-control in girls
Dadds & Powell (1991) . Community (N=228) . Clinic (N=54) . Preschool-age & school-age	CBP/mother CRD/mother	CRD was related to CBP scores No gender differences
Ingoldsby et al. (1999) . Community . boys=97 . Preschool-age	CBP/parents CRD+EMC/mother	CRD+EMC composite (boys age 2) related to maternal and paternal CBP scores (boys age 5)
Jouriles, Murphy et al. (1991) . Community . boys=200 . Preschool-age	CBP/Observer CRD/mother MCF/mother EMC/mother	CRD was related to CBP, predicted CBP over and above the effects of MCF and of EMC

(Table 2 continues)

Table 2 (continues)

The Relation Between Child-Related Disagreement and Child Adjustment in Toddler and Preschool-Aged Children

Study & sample	Construct/Rater	Findings
Jouriles, Murphy et al. (1991) CBP/mother . Community . boys=87 . Preschool-age & school age	CRD/mother MA/mother EMC/mother	CRD was related to CBP scores, predicted CBP scores over and above the effects of MA and EMC
Mahoney et al. (1997) . Clinic . boys=113, girls=33 . Preschool-age & school-age	CBP/Parents CRD/Parents MA/Parents	CRD was related to CBP scores, predicted CBP scores over and above the effects of MA Gender did not moderate the relation
Snyder et al. (1988) . Community (N=59) . Clinic (N=51) . boys=57, girls=53 . Preschool-age & school-age	CBP/Parents CRD/Parents	CRD was related to over-control

Note. Raters identified by the term parents indicates that both mothers' and fathers' perceptions were surveyed. CBP = child behaviour problems; CRD = child-related disagreement; EMC = exposure to marital conflict; MCF = marital conflict frequency; MA = marital adjustment.

Table 3

<i>Conflict Resolution Strategies and Child Adjustment in School-aged Children</i>		
Study & sample	Construct/Rater	Findings
Buehler et al. (1998) . Community . boys=427, girls=473	CBP/Youth CRD/Youth CRS/Youth	CRS was a more robust predictor of CBP than was CRD
Camara & Resnick (1989) . Community & Clinic . D=35 & ND=47 . boys=41, girls=41	CBP/Parents & Observer CBP/Parents & Teacher MCF/Parents & Observer CRS/Parents	MCF was unrelated to child outcomes, CRS were > positive CRS was related to lower CBP scores > negative CRS was related to higher CBP scores
Crockenberg & Forgays (1996) . Community . boys=16, girls=14	CBP/Parents CRS/Observer	> negative CRS was related to higher CBP scores
Crockenberg & Langrock (2001) . Community . boys=83, girls=81	CBP/Mothers CRS/Parents	> negative CRS was related to higher CBP scores
Goodman et al. (1999) . Community . boys=32, girls=25	CPS/Observer MCF/Parents CRS/Parents	MCF X CRS interaction associated with CPS for mothers, not for fathers Child gender was significant but not explored further

(Table 3 continues)

Table 3 (continues)

<i>Conflict Resolution Strategies and Child Adjustment in School-aged Children</i>		
Study & sample	Construct/Rater	Findings
Jenkins (2000) . Community . boys=41, girls=30	CBP/Mother & Teacher CRS/Mothers	> negative CRS was related to higher CBP scores
Katz & Gottman (1995) . Community (N=56) . boys=32, girls=24	CRS (T1)/Observer CBP (T2)/Teacher	MH at T1 (age 4-5) related to CBP scores at T2 (age 7-8) HAW at T1 was related to CBP scores at T2 WC at T1 was related to CBP scores at T2
Kerig (1996) . Community . boys=63, girls=51	CBP/Parents & Children CRS/Parents & Children	> negative CRS was related to CBP scores
Webster-Stratton & Hammond (1999) . Community (N=60) & Clinic (N=60) . boys=88, girls=32	CBP/Composite of Parent Report & Observer Rating CRS/Composite of Parent Report & Observer Rating	> negative CRS was related to higher CBP scores

Note. In the case of multiple reports from the same data set, the most comprehensive is reported here. CBP = child behaviour problems; CRS = conflict resolution strategies; CRD = child-related disagreement; MCF = marital conflict frequency; D = divorced families; ND = nondivorced families; CPS = child problem-solving skills; T1 = time 1; T2 = time 2; MH = marital hostility during dyadic interaction; HAW = husband angry/withdrawn; WC = wife contempt.

Table 4

Conflict Resolution Strategies and Child Adjustment in Preschool-Aged Children

Study & sample	Construct/Rater	Findings
Frosch & Mangelsdorf (2001) . Community . boys=40 , girls=38	CBP/Parents, teacher observer CRS/Observer	More negativity during conflict was associated with more CBP according to observer only
Ingoldsby et al. (1999) . High risk community . boys=129	CBP/Parents CRD/Mother CRS/Mother	The interaction of CRD X CRS was associated with CBP

Note. CBP = child behaviour problems; CRS = conflict resolution strategies; CRD = child-related disagreement.

Table 5

Demographic Characteristics of Fathers (n= 108)

Variables	<i>M (SD)</i>	%	Range
Age of father	35.13 (5.08)		24-49
Total years together (married/cohabiting)	08.25 (3.29)		03-19
Age of child (in months)	34.89 (9.66)		18-60
Weekly hours in paid employment or in studies	42.47 (7.96)		25-70
Ethnicity			
Canadian/Caucasian		66.7%	
Canadian/Minority		11.8%	
Unknown		22.2%	
Income of father			
Less than \$19,999		03.7%	
\$20,000 to \$39,999		26.9%	
\$40,000 to \$59,999		32.4%	
\$60,000 to \$79,999		23.1%	
\$80,000 to \$99,999		06.5%	
Greater than \$100,000		06.5%	
Occupational category			
Managerial		18.5%	
Professional		37.0%	
Technical		22.2%	
Administrative		02.8%	
Clerical		01.9%	
Retail		01.9%	
Other		14.8%	

Table 6

Demographic Characteristics of Mothers (n = 112)

Variables	<i>M (SD)</i>	%	Range
Age of mother	32.52 (4.16)		22-43
Total years together (married/cohabiting)	08.14 (3.19)		03-19
Age of child (in months)	35.13 (9.64)		18-60
Weekly hours in paid employment or in studies	35.86 (7.27)		20-60
Ethnicity			
Canadian/Caucasian		62.5%	
Canadian/Minority		11.6%	
Unknown		25.9%	
Income of mother			
Less than \$19,999		17.8%	
\$20,000 to \$39,999		38.4%	
\$40,000 to \$59,999		23.2%	
\$60,000 to \$79,999		12.5%	
\$80,000 to \$99,999		05.4%	
Greater than \$100,000		01.8%	
Occupational category			
Managerial		13.4%	
Professional		45.5%	
Technical		02.7%	
Administrative		11.6%	
Clerical		04.5%	
Retail		01.8%	
Other		20.5%	

Table 7

Means, Standard Deviations and Cronbach's Alpha Levels for Independent and Dependent Variables

Measure	<i>M (SD)</i>	Range	alpha	<i>N</i>
Mothers				
CRD	32.65 (9.43)	21-82	.91	112
CPS-C	18.29 (2.46)	10-21	.76 ^a	112
CPS-VA	10.45 (4.08)	01-21	.81	112
CRSI-P	15.46 (2.00)	12-20	.72	54
CRSI-CE	07.91 (2.64)	04-16	.83	54
DAS	38.88 (6.02)	18-48	.88	107
CBCL-I	49.15 (8.83)	29-70		112
CBCL-E	50.05 (7.67)	32-69		112
Fathers				
CRD	33.14 (7.78)	22-59	.85	108
CPS-C	17.70 (2.92)	07-21	.79	108
CPS-VA	08.54 (3.63)	02-18	.76 ^b	108
CRSI-P	15.44 (2.19)	11-20	.78	54
CRSI-CE	06.94 (2.39)	04-13	.77	54
DAS	39.32 (5.15)	17-47	.85	101
CBCL-I	49.82 (8.48)	29-75		108
CBCL-E	48.96 (8.06)	28-69		108

Note. CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRSI-P = Conflict Resolution Styles Inventory - Positive Problem-Solving Subscale (Kurdek, 1994); CRSI-CE = Conflict Resolution Styles Inventory - Conflict Engagement Subscale (Kurdek, 1994); DAS = Dyadic Adjustment Scale; Satisfaction Subscale (Spanier, 1976); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000).

^a alpha for mother ratings on the CPS-C increased to .77 when outliers were removed.

^b alpha for father ratings on the CPS-VA increased to .78 when outliers were removed.

Table 8

Pearson Correlations Among Variables for Mothers and Fathers

	CRD	CPS-C	CPS-VA	CRSI-P ^a	CRSI-CE ^a	CBCL-E	CBCL-I	DAS
CRD	.31**	-.36**	.53**	-.28*	.41**	.39**	.28**	-.63**
CPS-C	-.47**	.24*	-.32**	.50**	-.33*	-.13	-.01	.48**
CPS-VA	.39**	-.39**	.31**	-.34**	.65**	.17	.23*	-.51**
CRSI-P ^a	-.26*	.46**	-.37**	.41**	-.36**	-.20	.03	.38**
CRSI-CE ^a	.09	-.00	.32*	-.15	.29*	.13	.11	-.41**
CBCL-E	.31**	-.10	.13	-.14	-.02	.58**	.56**	-.25**
CBCL-I	.25**	-.11	.05	-.01	-.13	.54**	.50**	-.22*
DAS	-.32**	.50**	-.42**	.33*	-.18	-.16	-.00	.69**

Note. Values above the diagonal are based on mother ratings, values below the diagonal are based on father ratings, and bolded values on the diagonal are Pearson correlation coefficients between mothers and fathers on the same variables.

CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRSI-P = Conflict Resolution Styles Inventory - Positive Problem-Solving Subscale (Kurdek, 1994); CRSI-CE = Conflict Resolution Styles Inventory - Conflict Engagement Subscale (Kurdek, 1994); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); DAS = Dyadic Adjustment Scale; Satisfaction Subscale (Spanier, 1976).

^a*n* = 54

** *p* < .01; * *p* < .05

Table 9

Independent t tests for Comparisons of Independent and Dependent Variables Across Recruitment Group and Parent Gender

Variables	<i>M (SD)</i>	<i>M (SD)</i>
Recruitment Strategy	Advertisements	Parent Show/Other
CRD	31.91 (7.37)	33.04 (7.70)
CPS-C	18.20 (2.37)	17.71 (2.99)
CPS-VA	09.65 (3.98)	09.40 (3.72)
CRSI-P ^a	15.43 (2.13)	15.50 (2.05)
CRSI-CE ^a	07.59 (2.69)	07.15 (2.29)
CBCL-I	49.84 (8.40)	48.39 (8.65)
CBCL-E	48.82 (7.70)	49.91 (7.97)
DAS	39.60 (4.48)	38.61 (6.14)
Parent Gender	Mothers	Fathers
CRD	32.65 (9.43)	33.13 (7.74)
CPS-C	18.29 (2.46)	17.73 (2.83)
CPS-VA	10.45 (4.08) _b	08.54 (3.63) _c
CRSI-P ^a	15.46 (2.00)	15.44 (2.19)
CRSI-CE ^a	07.91 (2.64) _b	06.94 (2.39) _c
CBCL-I	49.15 (8.83)	49.82 (8.48)
CBCL-E	50.05 (7.67)	48.96 (8.06)
DAS	38.88 (6.02)	39.32 (5.15)

Note. Means with different subscripts differ significantly at $p < .05$.

CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRSI-P = Conflict Resolution Styles Inventory, Positive Problem-Solving Scale (Kurdek, 1994); CRSI-CE = Conflict Resolution Styles Inventory, Conflict Engagement Scale (Kurdek, 1994); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); DAS = Dyadic Adjustment Scale (Spanier, 1976).

^a $n = 54$

Table 10

ANOVA: Comparisons of Independent and Dependent Variables Between Parents with Children Aged 2, 3 and 4 years

Variables	Age 2 (n = 54) M (SD)	Age 3 (n = 34) M (SD)	Age 4 (n = 24) M (SD)
Mothers			
CRD	33.06 (10.11)	32.15 (06.97)	32.42 (11.09)
CPS-C	18.12 (02.35)	18.26 (02.85)	18.68 (02.14)
CPS-VA	10.26 (04.32)	10.03 (03.60)	11.47 (04.18)
CRSI-P ^a	15.50 (01.90)	15.62 (01.98)	14.80 (02.95)
CRSI-CE ^a	07.92 (02.71)	07.31 (02.36)	09.40 (02.70)
CBCL-I	47.70 (08.24)	49.09 (09.90)	52.50 (07.93)
CBCL-E	51.06 (07.39)	48.09 (08.01)	50.58 (07.60)
DAS	39.29 (06.04)	38.71 (05.22)	38.21 (07.03)
Fathers			
CRD	33.23 (07.27)	33.70 (09.53)	32.09 (06.09)
CPS-C	17.74 (03.10)	17.42 (02.86)	18.05 (02.65)
CPS-VA	08.60 (03.96)	09.16 (03.62)	07.45 (02.56)
CRSI-P ^a	15.53 (02.24)	15.46 (02.11)	14.80 (02.49)
CRSI-CE ^a	07.19 (02.51)	06.15 (01.52)	07.20 (03.35)
CBCL-I	48.41 (07.12)	50.15 (10.17)	52.72 (08.31)
CBCL-E	49.74 (07.96)	48.82 (07.66)	47.32 (08.95)
DAS	39.53 (05.39)	38.59 (05.84)	39.95 (03.02)

Note. Means with different subscripts differ significantly at $p < .05$.

CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRSI-P = Conflict Resolution Styles Inventory, Positive Problem-Solving Scale (Kurdek, 1994); CRSI-CE = Conflict Resolution Styles Inventory, Conflict Engagement Scale (Kurdek, 1994); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); DAS = Dyadic Adjustment Scale (Spanier, 1976)

^a $n = 54$

Table 11

HMR: Child Age as Moderator of the Relation Between Child-Related Disagreement and Child Adjustment Among Mothers (N = 112)

Variables	<i>B</i>	<i>SE B</i>	β
CBCL-I			
Step 1			
CRD	.26	.08	.28**
Step 2			
CRD	.28	.08	.29**
Child age	.20	.08	.22*
Step 3			
CRD	.27	.29	.29
Child age	.20	.27	.22
CRD X child age	.08	.01	.00
CBCL-E			
Step 1			
CRD	.32	.07	.39**
Step 2			
CRD	.32	.07	.39**
Child age	-.04	.07	-.04
Step 3			
CRD	.14	.24	.17
Child age	-.20	.23	-.25
CRD X child age	.05	.01	.30

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991). CBCL-I $R^2 = .08$ for Step 1; $R^2\Delta = .05$ for Step 2 ($ps < .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$). CBCL-E $R^2 = .15$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 12

HMR: Child Age as Moderator of the Relation Between Conflict and Child Adjustment Among Fathers (N = 108)

Variables	<i>B</i>	<i>SE B</i>	β
CBCL-I			
Step 1			
CRD	.28	.10	.26**
Step 2			
CRD	.30	.10	.28**
Child age	.17	.08	.20*
Step 3			
CRD	.16	.42	.15
Child age	.03	.40	.03
CRD X child age	.04	.01	.20
CBCL-E			
Step 1			
CRD	.33	.09	.32**
Step 2			
CRD	.31	.09	.30**
Child age	-.08	.07	-.10
Step 3			
CRD	.09	.39	.09
Child age	-.30	.38	-.35
CRD X child age	.06	.01	.32

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991). CBCL-I $R^2 = .07$ for Step 1; $R^2\Delta = .03$ for Step 2 ($ps < .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$). CBCL-E $R^2 = .10$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 13

Independent t tests for Comparisons of Independent and Dependent Variables Across Child Gender

Variables	Girls <i>M (SD)</i>	Boys <i>M (SD)</i>
Mothers		
CRD	30.86 (06.08) _a	34.71 (11.94) _b
CPS-C	18.36 (02.33)	18.20 (02.63)
CPS-VA	09.67 (03.93) _a	11.35 (04.11) _b
CRSI-P ^c	15.42 (02.14)	15.52 (01.83)
CRSI-CE ^c	07.68 (02.88)	08.21 (02.30)
CBCL-I	47.73 (08.89)	50.79 (08.56)
CBCL-E	49.15 (07.56)	51.10 (07.75)
DAS	39.52 (05.10)	38.08 (06.96)
Fathers		
CRD	33.17 (08.08)	33.10 (07.47)
CPS-C	17.47 (03.06)	17.98 (02.75)
CPS-VA	08.77 (03.66)	08.27 (03.62)
CRSI-P ^c	15.32 (02.26)	15.61 (02.15)
CRSI-CE ^c	06.45 (01.98)	07.61 (02.76)
CBCL-I	49.36 (09.01)	50.39 (07.85)
CBCL-E	47.46 (07.33) ^a	50.78 (08.58) ^b
DAS	39.21 (05.56)	39.44 (04.72)

Note. Means with different subscripts differ significantly at $p < .05$.

CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRSI-P = Conflict Resolution Styles Inventory, Positive Problem-Solving Scale (Kurdek, 1994); CRSI-CE = Conflict Resolution Styles Inventory, Conflict Engagement Scale (Kurdek, 1994); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); DAS = Dyadic Adjustment Scale (Spanier, 1976).

^c $n = 54$

Table 14

HMR: Child Gender as Moderator of the Relation Between Child-Related Disagreement and Child Adjustment Among Mothers (N = 112)

Variables	<i>B</i>	<i>SE B</i>	β
CBCL-I			
Step 1			
CRD	.26	.08	.28**
Step 2			
CRD	.24	.08	.25**
Child gender	2.13	1.64	.12
Step 3			
CRD	.30	.18	.32
Child gender	4.89	6.80	.27
CRD X child gender	-0.08	.20	-.18
CBCL-E			
Step 1			
CRD	.37	.10	.32**
Step 2			
CRD	.36	.10	.31**
Child gender	.81	1.39	.05
Step 3			
CRD	.58	.15	.50**
Child gender	13.66	6.81	.91
CRD X child gender	-.41	.21	-.91

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991). CBCL-I $R^2 = .08$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$). CBCL-E $R^2 = .10$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .03$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 15

HMR: Child Gender as Moderator of the Relation Between Child-Related Disagreement and Child Adjustment Among Fathers (N = 108)

Variables	<i>B</i>	<i>SE B</i>	β
CBCL-I			
Step 1			
CRD	.21	.11	.18
Step 2			
CRD	.21	.11	.18
Child gender	1.45	1.58	.09
Step 3			
CRD	-.02	.14	-.01
Child gender	-16.86	7.51	-1.03*
CRD X child gender	.56	.23	1.16*
CBCL-E			
Step 1			
CRD	.33	.09	.32**
Step 2			
CRD	.33	.09	.32**
Child gender	3.34	1.45	.21*
Step 3			
CRD	.16	.12	.15
Child gender	-10.39	6.34	-.65
CRD X child gender	.41	.18	.89*

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991). CBCL-I $R^2 = .03$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .05$ for Step 3 ($ps < .05$). CBCL-E $R^2 = .10$ for Step 1; $R^2\Delta = .04$ for Step 2 ($ps < .05$); $R^2\Delta = .04$ for Step 3 ($ps < .05$).

** $p < .01$; * $p < .05$

Table 16

Pearson Correlations Among Variables for Fathers

	CRD	CPS-C	CPS-VA	CBCL-E	CBCL-I
CRD		-.50**	.49**	.50**	.42**
CPS-C	-.44**		-.40**	-.24	-.17
CPS-VA	.32*	-.39**		.17	.21
CBCL-E	.17	-.02	.12		.66**
CBCL-I	.14	-.09	-.04	.46**	

Note. Values above the diagonal are based on father ratings of boys and values below the diagonal are based on father ratings of girls.

CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000).

** $p < .01$; * $p < .05$

Table 17

SMR: CPS-VA as Mediator of the Relation Between Maternal Ratings of Child-Related Disagreement and of Child Internalizing Scores

Predictors	<i>B</i>	β	<i>R</i> ²
CPS-VA			
CRD	.23	.53**	.28
CBCL-I			
CRD	.26	.28**	.08
CBCL-I			
CRD	.20	.22*	
CPS-VA	.25	.11	.09

Note. CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000).

** $p < .01$; * $p < .05$

Table 18

HMR: Conflict Resolution Strategies as Moderators of the Relation Between Maternal Ratings of Child-Related Disagreement and of Internalizing Problems (N = 112)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.26	.08	.28**
Step 2			
CRD	.30	.09	.32**
CPS-C	.38	.35	.10
Step 3			
CRD	.36	.40	.38
CPS-C	.51	.92	.14
CRD X CPS-C	-.03	.02	-.06
CPS-VA			
Step 1			
CRD	.26	.08	.28**
Step 2			
CRD	.20	.10	.22*
CPS-VA	.25	.23	.11
Step 3			
CRD	.19	.28	.20
CPS-VA	.22	.55	.10
CRD X CPS-VA	.07	.01	.02

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .08$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .08$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 19

HMR: Conflict Resolution Strategies as Moderator of the Relation Between Maternal Ratings of Child-Related Disagreement and of Externalizing Problems (N = 112)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.31	.07	.39**
Step 2			
CRD	.32	.07	.39**
CPS-C	.03	.29	.01
Step 3			
CRD	.01	.33	.01
CPS-C	-.64	.76	-.20
CRD X CPS-C	.01	.01	.37
CPS-VA			
Step 1			
CRD	.31	.07	.39**
Step 2			
CRD	.33	.08	.41**
CPS-VA	-.08	.19	-.04
Step 3			
CRD	.63	.23	.77**
CPS-VA	.48	.45	.26
CRD X CPS-VA	-.01	.01	-.59

Note. CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .15$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .01$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .15$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .01$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 20

HMR: Conflict Resolution Strategies as Moderator of the Relation Between Paternal Ratings of Child-Related Disagreement and of Internalizing Problems in Daughters (N = 108)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.16	.14	.14
Step 2			
CRD	.14	.16	.13
CPS-C	-.11	.43	-.03
Step 3			
CRD	-.90	.64	-.81
CPS-C	-2.46	1.46	-.83
CRD X CPS-C	.06	.03	.95
CPS-VA			
Step 1			
CRD	.01	.16	.01
Step 2			
CRD	.06	.18	.00
CPS-VA	.05	.34	.02
Step 3			
CRD	.31	.50	.24
CPS-VA	1.03	1.54	.42
CRD X CPS-VA	-.03	.04	-.54

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .02$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .05$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .00$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .01$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 21

HMR: Conflict Resolution Strategies as Moderator of the Relation Between Paternal Ratings of Child-Related Disagreement and of Externalizing Problems in Daughters (N = 108)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.17	.14	.15
Step 2			
CRD	.14	.15	.13
CPS-C	-.20	.39	-.07
Step 3			
CRD	-.40	.93	-.36
CPS-C	-1.23	1.78	-.45
CRD X CPS-C	.03	.05	.52
CPS-VA			
Step 1			
CRD	.14	.14	.14
Step 2			
CRD	.07	.14	.06
CPS-VA	.42	.28	.20
Step 3			
CRD	.19	.40	.18
CPS-VA	.81	1.25	.40
CRD X CPS-VA	-.01	.03	-.26

Note. CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .02$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .01$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .02$ for Step 1; $R^2\Delta = .04$ for Step 2 ($ps > .05$); $R^2\Delta = .00$ for Step 3 ($ps > .05$).

** $p < .01$; * $p < .05$

Table 22

HMR: Conflict Resolution Strategies as Moderator of the Relation Between Paternal Ratings of Child-Related Disagreement and of Internalizing Problems in Sons (N = 108)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.44	.13	.41**
Step 2			
CRD	.47	.16	.44**
CPS-C	.16	.44	.05
Step 3			
CRD	-.42	.78	-.40
CPS-C	-1.85	1.77	-.64
CRD X CPS-C	.05	.04	.80
CPS-VA			
Step 1			
CRD	.62	.17	.47**
Step 2			
CRD	.67	.20	.50**
CPS-VA	-.15	.37	-.06
Step 3			
CRD	1.53	.45	1.16**
CPS-VA	2.72	1.39	1.15
CRD X CPS-VA	-.09	.04	-1.68*

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .18$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .02$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .23$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .07$ for Step 3 ($ps < .05$).

** $p < .01$; * $p < .05$

Table 23

HMR: Conflict Resolution Strategies as Moderator of the Relation Between Paternal Ratings of Child-Related Disagreement and of Externalizing Problems in Sons (N = 108)

Variables	B	SE B	β
CPS-C			
Step 1			
CRD	.57	.14	.49**
Step 2			
CRD	.57	.17	.50**
CPS-C	.04	.46	.01
Step 3			
CRD	.03	.82	.02
CPS-C	-1.18	1.87	-.37
CRD X CPS-C	.03	.04	.44
CPS-VA			
Step 1			
CRD	.73	.22	.45**
Step 2			
CRD	.82	.23	.51**
CPS-VA	-.41	.42	-.14
Step 3			
CRD	2.45	.68	1.51**
CPS-VA	5.52	2.37	1.93
CRD X CPS-VA	-.19	.07	-2.66*

Note. CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CPS-C = Conflicts and Problem-Solving Scale - Cooperation Subscale (Kerig, 1996); CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996). CPS-C $R^2 = .25$ for Step 1; $R^2\Delta = .00$ for Step 2 ($ps > .05$); $R^2\Delta = .01$ for Step 3 ($ps > .05$). CPS-VA $R^2 = .21$ for Step 1; $R^2\Delta = .01$ for Step 2 ($ps > .05$); $R^2\Delta = .11$ for Step 3 ($ps < .05$).

** $p < .01$; * $p < .05$

Table 24

HMR: Slope Analyses of CBCL-I Scores Among Fathers of Boys

Predictors	<i>B</i>	β	<i>p</i>
CPS-VA High			
CRD	.79	.44**	.00
CRD	.83	.46**	.00
CPS-VA High	-.14	-.05	.72
CRD	1.71	.96**	.00
CPS-VA High	5.74	2.18*	.02
CRD X CPS-VA High	-.19	-2.49*	.01
CPS-VA Low			
CRD	.79	.44**	.00
CRD	.83	.46**	.00
CPS-VA Low	-.14	-.05	.72
CRD	2.87	1.61**	.00
CPS-VA Low	5.74	2.18*	.02
CRD X CPS-VA Low	-.19	-2.91*	.01

Note. CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CPS-VA High = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded at 1 standard deviation above the mean; CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA Low = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded at 1 standard deviation below the mean.

** $p < .01$; * $p < .05$

Table 25

HMR: Slope Analyses of CBCL-E Scores Among Fathers of Boys

Predictors	<i>B</i>	β	<i>p</i>
CPS-VA High			
CRD	.87	.45**	.00
CRD	1.00	.52**	.00
CPS-VA High	-.47	-.16	.26
CRD	1.86	.96**	.00
CPS-VA High	5.23	1.83	.05
CRD X CPS-VA High	-.18	-2.24*	.03
CPS-VA Low			
CRD	.87	.45**	.00
CRD	1.00	.52**	.00
CPS-VA Low	-.47	-.16	.26
CRD	2.99	1.55**	.00
CPS-VA Low	5.23	1.83	.05
CRD X CPS-VA Low	-.18	-2.61*	.03

Note. CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CPS-VA High = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded at 1 standard deviation above the mean; CRD = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991); CPS-VA Low = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded at 1 standard deviation below the mean.

** $p < .01$; * $p < .05$

Table 26

HMR: Johnson-Neyman Technique for Evaluating the Significance of the Difference Between CBCL-I Regression Lines at Specific Points of CPS-VA for High and for Low Levels of Child-Related Disagreement

Predictors	<i>B</i>	β	<i>p</i>
CRD High			
CPS-VA D	1.16	.07	.61
CPS-VA D	-1.69	-.10	.45
CRD High	.59	.49**	.00
CPS-VA D	-7.73	-.49*	.04
CRD High	1.10	.91**	.00
CPS-VA D X CRD High	-.71	-.51	.05
CRD Low			
CPS-VA D	1.16	.07	.61
CPS-VA D	-1.69	-.10	.45
CRD Low	.59	.49**	.00
CPS-VA D	1.56	.10	.56
CRD Low	1.10	.91**	.00
CPS-VA D X CRD Low	-.71	-.59	.05

Note. The significance of regression coefficients of b_1 (CPS-VA D) at Step 3 determines whether or not the regression lines are significantly different from each other at the specified value of conflict frequency.

CBCL-I = Child Behavior Checklist-Internalizing Subscale (Achenbach & Rescorla, 2000); CRD High = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991), CRD score = 40; CPS-VA D = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded into a Dummy Variable; CRD Low = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991), CRD score = 22.

** $p < .01$; * $p < .05$

Table 27

HMR: Johnson-Neyman Technique for Evaluating the Significance of the Difference Between CBCL-E Regression Lines at Specific Points of CPS-VA for High and for Low Levels of Child-Related Disagreement

Predictors	<i>B</i>	β	<i>p</i>
CRD High			
CPS-VA D	-1.45	-.08	.56
CPS-VA D	-5.30	-.31*	.02
CRD High	.79	.61**	.00
CPS-VA D	-5.50	-.32*	.01
CRD High	1.12	.86**	.00
CPS-VA D X CRD High	-.45	-.28	.22
CRD Low			
CPS-VA D	-1.45	-.08	.56
CPS-VA D	-5.30	-.31*	.02
CRD Low	.79	.61**	.00
CPS-VA D	-.91	-.05	.82
CRD Low	1.12	.86**	.00
CPS-VA D X CRD Low	-.45	-.44	.22

Note. The significance of regression coefficients of b_1 (CPS-VA D) at Step 3 determines whether or not the regression lines are significantly different from each other at the specified value of conflict frequency.

CBCL-E = Child Behavior Checklist-Externalizing Subscale (Achenbach & Rescorla, 2000); CRD High = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991), CRD score = 40; CPS-VA D = Conflicts and Problem-Solving Scale - Verbal Aggression Subscale (Kerig, 1996), recoded into a Dummy Variable; CRD Low = Child-Related Disagreements Scale (Jouriles, Murphy et al., 1991), CRD score = 22.

** $p < .01$; * $p < .05$

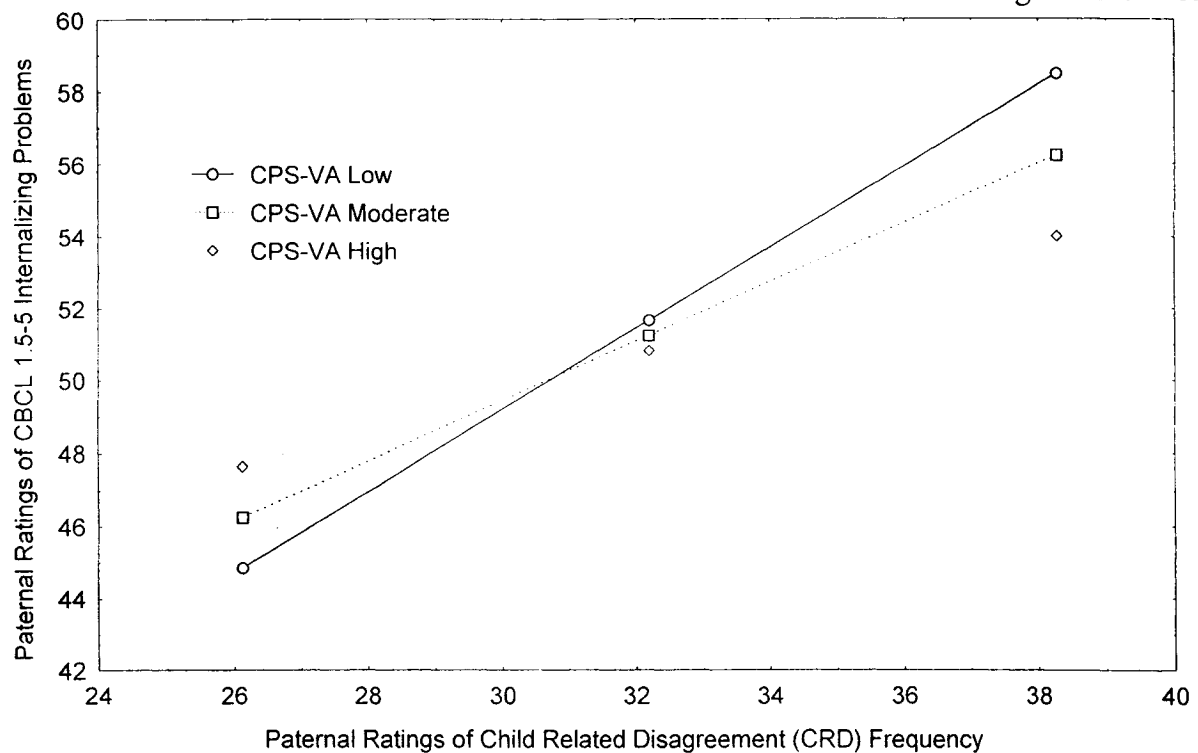


Figure 1. The moderating role of verbal aggression strategies on the relation between father reports of child-related disagreement frequency and father ratings of sons' internalizing behaviour problems. CPS-VA Low = Low frequency of verbal aggression strategies; CPS-VA Moderate = Moderate frequency of verbal aggression strategies; CPS-VA High = High frequency of verbal aggression strategies.

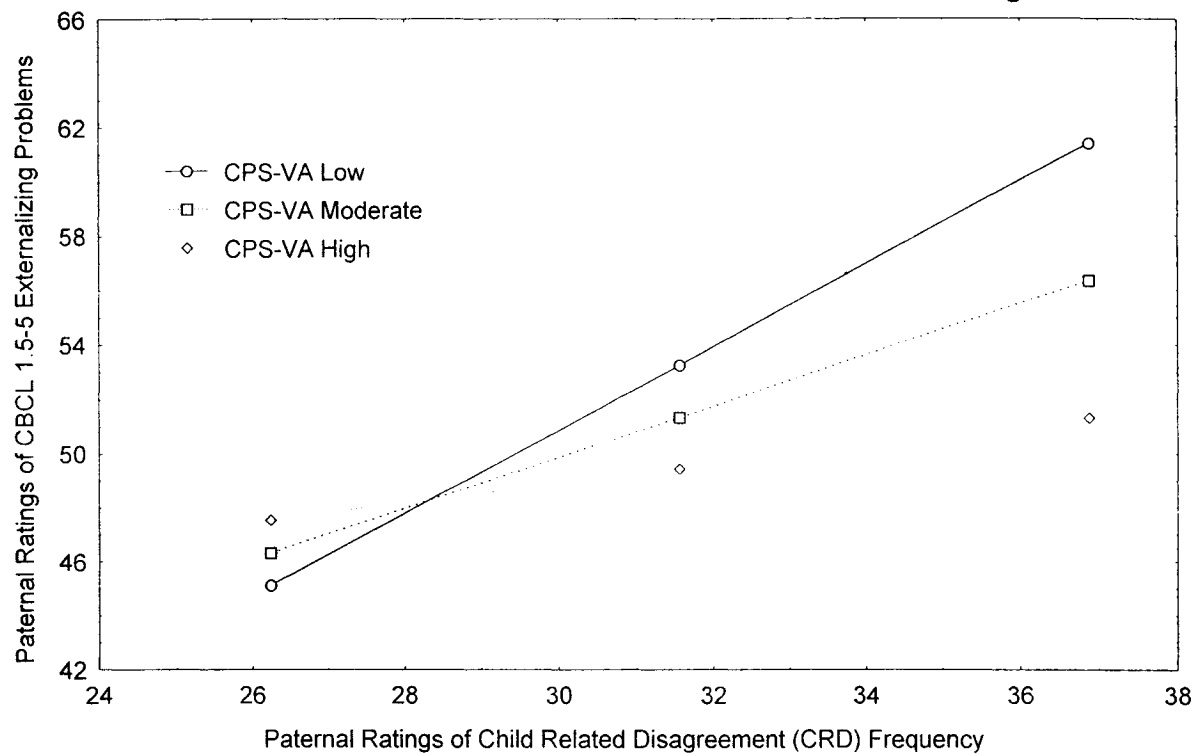


Figure 2. The moderating role of verbal aggression strategies on the relation between father reports of child-related disagreement frequency and father ratings of sons' externalizing behaviour problems. CPS-VA Low = Low frequency of verbal aggression strategies; CPS-VA Moderate = Moderate frequency of verbal aggression strategies; CPS-VA High = High frequency of verbal aggression strategies.

Appendix A

Child Behavior Checklist/ 2 - 3 (Achenbach, 1992)

Below is a list of items that describe children. For each item that describes your child **now or within the past 2 months**, please circle the **2** if the item is **very true** or **often true** of your child. Circle **1** if the item is **somewhat true** or **sometimes true** of your child. If the item is **not true** of your child, circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to your child

0 = Not True 1 = Somewhat True or Sometimes True 2 = Very True or Often True

- | | | | | | | | |
|---|---|---|--|---|---|---|--|
| 0 | 1 | 2 | 1. Aches or pains (without medical cause) | 0 | 1 | 2 | 36. Gets into everything |
| 0 | 1 | 2 | 2. Acts too young for age | 0 | 1 | 2 | 37. Gets too upset when separated from parents |
| 0 | 1 | 2 | 3. Afraid to try new things | 0 | 1 | 2 | 38. Has trouble getting to sleep |
| 0 | 1 | 2 | 4. Avoids looking others in the eye | 0 | 1 | 2 | 39. Headaches (without medical cause) |
| 0 | 1 | 2 | 5. Can't concentrate, pay attention long | 0 | 1 | 2 | 40. Hits others |
| 0 | 1 | 2 | 6. Can't sit still or restless | 0 | 1 | 2 | 41. Holds his/her breath |
| 0 | 1 | 2 | 7. Can't stand having things out of place | 0 | 1 | 2 | 42. Hurts animals or people without meaning to |
| 0 | 1 | 2 | 8. Can't stand waiting: wants everything now | 0 | 1 | 2 | 43. Looks unhappy without good reason |
| 0 | 1 | 2 | 9. Chews on things that aren't edible | 0 | 1 | 2 | 44. Angry moods |
| 0 | 1 | 2 | 10. Clings to adults or too dependent | 0 | 1 | 2 | 45. Nausea, feels sick (without medical cause) |
| 0 | 1 | 2 | 11. Constantly seeks help | 0 | 1 | 2 | 46. Nervous movements or twitching (describe): _____ |
| 0 | 1 | 2 | 12. Constipated, doesn't move bowels | 0 | 1 | 2 | 47. Nervous, high strung, or tense |
| 0 | 1 | 2 | 13. Cries a lot | 0 | 1 | 2 | 48. Nightmares |
| 0 | 1 | 2 | 14. Cruel to animals | 0 | 1 | 2 | 49. Overeating |
| 0 | 1 | 2 | 15. Defiant | 0 | 1 | 2 | 50. Overtired |
| 0 | 1 | 2 | 16. Demands must be met immediately | 0 | 1 | 2 | 51. Overweight |
| 0 | 1 | 2 | 17. Destroys his/her own things | 0 | 1 | 2 | 52. Painful bowel movements |
| 0 | 1 | 2 | 18. Destroys things belonging to his/her family or other children | 0 | 1 | 2 | 53. Physically attacks people |
| 0 | 1 | 2 | 19. Diarrhea or loose bowels when not sick | 0 | 1 | 2 | 54. Picks nose, skin or other parts of body (describe): _____ |
| 0 | 1 | 2 | 20. Disobedient | 0 | 1 | 2 | 55. Plays with own sex parts too much |
| 0 | 1 | 2 | 21. Disturbed by any change in routine | 0 | 1 | 2 | 56. Poorly coordinated or clumsy |
| 0 | 1 | 2 | 22. Doesn't want to sleep alone | 0 | 1 | 2 | 57. Problems with eyes (without medical cause) (describe): _____ |
| 0 | 1 | 2 | 23. Doesn't answer when people talk to him/her | 0 | 1 | 2 | 58. Punishment doesn't change his/her behaviour |
| 0 | 1 | 2 | 24. Doesn't eat well (describe): _____ | 0 | 1 | 2 | 59. Quickly shifts from one activity to another |
| 0 | 1 | 2 | 25. Doesn't get along with other children | 0 | 1 | 2 | 60. Rashes or other skin problems (without medical cause) |
| 0 | 1 | 2 | 26. Doesn't know how to have fun, acts like a little adult | 0 | 1 | 2 | 61. Refuses to eat |
| 0 | 1 | 2 | 27. Doesn't seem to feel guilty after misbehaving | 0 | 1 | 2 | 62. Refuses to play active games |
| 0 | 1 | 2 | 28. Doesn't want to go out of home | 0 | 1 | 2 | 63. Repeatedly rocks head or body |
| 0 | 1 | 2 | 29. Easily frustrated | 0 | 1 | 2 | 64. Resists going to bed at night |
| 0 | 1 | 2 | 30. Easily jealous | 0 | 1 | 2 | 65. Resists toilet training (describe): _____ |
| 0 | 1 | 2 | 31. Eats or drinks things that are not food—don't include sweets (describe): _____ | 0 | 1 | 2 | 66. Screams a lot |
| 0 | 1 | 2 | 32. Fears certain animals, situations, or places (describe): _____ | 0 | 1 | 2 | 67. Seems unresponsive to affection |
| 0 | 1 | 2 | 33. Feelings are easily hurt | 0 | 1 | 2 | 68. Self-conscious or easily embarrassed |
| 0 | 1 | 2 | 34. Gets hurt a lot, accident prone | | | | |
| 0 | 1 | 2 | 35. Gets in many fights | | | | |

- 0 1 2 69. Selfish or won't share
- 0 1 2 70. Shows little affection toward people
- 0 1 2 71. Shows little interest in things around him/her.
- 0 1 2 72. Shows too little fear of getting hurt
- 0 1 2 73. Too shy or timid
- 0 1 2 74. Sleeps less than most children during day and/or night (describe): _____
- 0 1 2 75. Smears or plays with bowel movements
- 0 1 2 76. Speech problems (describe): _____
- 0 1 2 77. Stares into space or seems preoccupied
- 0 1 2 78. Stomach aches or cramps (without medical cause)
- 0 1 2 79. Stores up many things that he/she doesn't need (describe): _____
- 0 1 2 80. Strange behaviour (describe): _____
- 0 1 2 81. Stubborn, sullen or irritable
- 0 1 2 82. Sudden changes in mood or feelings
- 0 1 2 83. Sulks a lot
- 0 1 2 84. Talks or cries out in sleep
- 0 1 2 85. Temper tantrums or hot temper
- 0 1 2 86. Too concerned with neatness/cleanliness
- 0 1 2 87. Too fearful or anxious
- 0 1 2 88. Uncooperative
- 0 1 2 89. Under active, slow moving, or lacks energy
- 0 1 2 90. Unhappy, sad, or depressed
- 0 1 2 91. Unusually loud
- 0 1 2 92. Upset by new people or situations (describe): _____
- 0 1 2 93. Vomiting, throwing up (without medical cause)
- 0 1 2 94. Wakes up often at night
- 0 1 2 95. Wanders away from home
- 0 1 2 96. Wants a lot of attention
- 0 1 2 97. Whining
- 0 1 2 98. Withdrawn, doesn't get involved with others
- 0 1 2 99. Worries

Appendix B

Child Behavior Checklist/1.5-5 (Achenback & Rescorla, 2000)

Below is a list of items that describe children. For each item that describes your child **now or within the past 2 months**, please circle the **2** if the item is **very true** or **often true** of your child. Circle **1** if the item is **somewhat true** or **sometimes true** of your child. If the item is **not true** of your child, circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to your child

0 = Not True	1 = Somewhat True or Sometimes True	2 = Very True or Often True
0 1 2	1. Aches or pains (without medical cause)	0 1 2 36. Gets into everything
0 1 2	2. Acts too young for age	0 1 2 37. Gets too upset when separated from parents
0 1 2	3. Afraid to try new things	0 1 2 38. Has trouble getting to sleep
0 1 2	4. Avoids looking others in the eye	0 1 2 39. Headaches (without medical cause)
0 1 2	5. Can't concentrate, pay attention long	0 1 2 40. Hits others
0 1 2	6. Can't sit still or restless	0 1 2 41. Holds his/her breath
0 1 2	7. Can't stand having things out of place	0 1 2 42. Hurts animals or people without meaning to
0 1 2	8. Can't stand waiting: wants everything now	0 1 2 43. Looks unhappy without good reason
0 1 2	9. Chews on things that aren't edible	0 1 2 44. Angry moods
0 1 2	10. Clings to adults or too dependent	0 1 2 45. Nausea, feels sick (without medical cause)
0 1 2	11. Constantly seeks help	0 1 2 46. Nervous movements or twitching (describe): _____
0 1 2	12. Constipated, doesn't move bowels	0 1 2 47. Nervous, high strung, or tense
0 1 2	13. Cries a lot	0 1 2 48. Nightmares
0 1 2	14. Cruel to animals	0 1 2 49. Overeating
0 1 2	15. Defiant	0 1 2 50. Overtired
0 1 2	16. Demands must be met immediately	0 1 2 51. Shows panic for no good reason
0 1 2	17. Destroys his/her own things	0 1 2 52. Painful bowel movements
0 1 2	18. Destroys things belonging to his/her family or other children	0 1 2 53. Physically attacks people
0 1 2	19. Diarrhea or loose bowels when not sick	0 1 2 54. Picks nose, skin or other parts of body (describe): _____
0 1 2	20. Disobedient	0 1 2 55. Plays with own sex parts too much
0 1 2	21. Disturbed by any change in routine	0 1 2 56. Poorly coordinated or clumsy
0 1 2	22. Doesn't want to sleep alone	0 1 2 57. Problems with eyes (without medical cause) (describe): _____
0 1 2	23. Doesn't answer when people talk to him/her	0 1 2 58. Punishment doesn't change his/her behaviour
0 1 2	24. Doesn't eat well (describe): _____	0 1 2 59. Quickly shifts from one activity to another
0 1 2	25. Doesn't get along with other children	0 1 2 60. Rashes or other skin problems (without medical cause)
0 1 2	26. Doesn't know how to have fun, acts like a little adult	0 1 2 61. Refuses to eat
0 1 2	27. Doesn't seem to feel guilty after misbehaving	0 1 2 62. Refuses to play active games
0 1 2	28. Doesn't want to go out of home	0 1 2 63. Repeatedly rocks head or body
0 1 2	29. Easily frustrated	0 1 2 64. Resists going to bed at night
0 1 2	30. Easily jealous	0 1 2 65. Resists toilet training (describe): _____
0 1 2	31. Eats or drinks things that are not food—don't include sweets (describe): _____	0 1 2 66. Screams a lot
0 1 2	32. Fears certain animals, situations, or places (describe): _____	0 1 2 67. Seems unresponsive to affection
0 1 2	33. Feelings are easily hurt	0 1 2 68. Self-conscious or easily embarrassed
0 1 2	34. Gets hurt a lot, accident prone	
0 1 2	35. Gets in many fights	

- 0 1 2 69. Selfish or won't share
 0 1 2 70. Shows little affection toward people
 0 1 2 71. Shows little interest in things around him/her.
 0 1 2 72. Shows too little fear of getting hurt
 0 1 2 73. Too shy or timid
 0 1 2 74. Sleeps less than most children during day and/or night (describe): _____
 0 1 2 75. Smears or plays with bowel movements
 0 1 2 76. Speech problems (describe): _____
 0 1 2 77. Stares into space or seems preoccupied
 0 1 2 78. Stomach aches or cramps (without medical cause)
 0 1 2 79. Rapid shifts between sadness and excitement
 0 1 2 80. Strange behaviour (describe): _____
 0 1 2 81. Stubborn, sullen or irritable
 0 1 2 82. Sudden changes in mood or feelings
 0 1 2 83. Sulks a lot
 0 1 2 84. Talks or cries out in sleep
 0 1 2 85. Temper tantrums or hot temper
 0 1 2 86. Too concerned with neatness/cleanliness
 0 1 2 87. Too fearful or anxious
 0 1 2 88. Uncooperative
 0 1 2 89. Under active, slow moving, or lacks energy
 0 1 2 90. Unhappy, sad, or depressed
 0 1 2 91. Unusually loud
 0 1 2 92. Upset by new people or situations (describe): _____
 0 1 2 93. Vomiting, throwing up (without medical cause)
 0 1 2 94. Wakes up often at night
 0 1 2 95. Wanders away from home
 0 1 2 96. Wants a lot of attention
 0 1 2 97. Whining
 0 1 2 98. Withdrawn, doesn't get involved with others
 0 1 2 99. Worries

Appendix C

The Child-Related Disagreement Scale (CRD; Jouriles, Murphy et al., 1991)

Couples with children find many different topics to disagree on. Please indicate how often, during the last 2 months, you and your partner have had disagreements about the areas listed below:

	Never	Now & Then	Week	Almost Every Day	Daily	
1. letting our child make a mess all over the house	1	2	3	4	5	6
2. buying too many or too expensive toys	1	2	3	4	5	6
3. babying our child	1	2	3	4	5	6
4. being too lenient with our child	1	2	3	4	5	6
5. expecting our child to follow rules which are too much for his/her age	1	2	3	4	5	6
6. being too casual about our child's clothes, grooming, dirty face, etc.	1	2	3	4	5	6
7. being too quick to discipline our child	1	2	3	4	5	6
8. not keeping a close enough eye on our child's whereabouts	1	2	3	4	5	6
9. being too casual about seeing a doctor	1	2	3	4	5	6
10. pushing our child to learn too much at an early age	1	2	3	4	5	6
11. being too casual with our child about behaviour that could lead to accidents	1	2	3	4	5	6
12. not taking an equal hand in disciplining our child	1	2	3	4	5	6
13. being too tired (reasonably or not) to spend time with our child when he/she wanted it	1	2	3	4	5	6
14. doing the easy or fun things, but not too many of the hard or boring things in childcare	1	2	3	4	5	6
15. having to be asked to do a little with our child when I am dead on my feet or not feeling well	1	2	3	4	5	6
16. criticizing my child-rearing practices from the sidelines (e.g., more comments than help)	1	2	3	4	5	6
17. letting some bit of misbehaviour go on and on until I finally do something about it myself	1	2	3	4	5	6
18. being hardheaded about certain aspects of child-rearing	1	2	3	4	5	6
19. implying that some of our child's misbehaviour is partly my fault	1	2	3	4	5	6
20. not sticking to agreements we made about child care or child-rearing	1	2	3	4	5	6
21. not trusting my judgment in certain aspects of child-rearing	1	2	3	4	5	6

Appendix D

The Conflicts and Problem-Solving Scale (CPS; Kerig, 1996)

What strategies do **You** use when you and your partner have a disagreement about child-related issues? Thinking about the past two months, circle the response that indicates how often **YOU** use each of the strategies presented below.

Example: If you *SOMETIMES* interrupt your partner while he/she is describing how he/she feels in the context of a child-related disagreement (e.g., giving the child desert when he/she did not finish his/her meal; being too quick to discipline your child), you would circle **2**.

	Never 0	Rarely 1	Sometimes 2	Often 3
1. I talk it out with my partner	0	1	2	3
2. I insist on my own point of view	0	1	2	3
3. I express my thoughts and feelings openly	0	1	2	3
4. I try to convince my partner of my own way of thinking	0	1	2	3
5. I listen to my partner's point of view	0	1	2	3
6. I raise my voice, yell, shout	0	1	2	3
7. I try to understand what my partner is really feeling	0	1	2	3
8. I interrupt/don't listen to my partner	0	1	2	3
9. I try to reason with my partner	0	1	2	3
10. I become sarcastic	0	1	2	3
11. I try to find a solution that meets both of our needs equally	0	1	2	3
12. I make accusations	0	1	2	3
13. I use name-calling, cursing/swearing, insulting	0	1	2	3
14. I say or do something to hurt my partner's feelings	0	1	2	3

Appendix E

Conflict Resolution Style Inventory (CRSI: Kurdek, 1994)

Using the scale 1 = 'Never' to 5 = 'Always'... Rate how frequently YOU use each of the following styles to deal with arguments or disagreements with your partner.

	Never.....Always				
	1	2	3	4	5
1. Launching personal attacks	1	2	3	4	5
2. Focussing on the problem at hand	1	2	3	4	5
3. Exploding and getting out of control	1	2	3	4	5
4. Sitting down and discussing differences constructively	1	2	3	4	5
5. Getting carried away and saying things that aren't meant	1	2	3	4	5
6. Finding alternatives that are acceptable to each of us	1	2	3	4	5
7. Throwing insults and digs	1	2	3	4	5
8. Negotiating and compromising	1	2	3	4	5

Appendix F

Demographics

1. Please indicate your gender: Male ☐ Female ☐
2. What is your age? _____ YEARS
What is your partner's age? _____ YEARS
3. Please describe your child/children:
- | | Age | Child's Gender | | Living with you? |
|-----------|-------|----------------------------|------------------------------|--|
| Child # 1 | _____ | Male ☐ | Female ☐ | Yes ☐ No ☐ |
| Child # 2 | _____ | Male ☐ | Female ☐ | Yes ☐ No ☐ |
| Child # 3 | _____ | Male ☐ | Female ☐ | Yes ☐ No ☐ |
| Child # 4 | _____ | Male ☐ | Female ☐ | Yes ☐ No ☐ |
| Child # 5 | _____ | Male ☐ | Female ☐ | Yes ☐ No ☐ |
4. Do any of your children have a chronic illness or disability?
Yes ☐ No ☐ If yes, please specify _____
(If you need more room, please use the back of this page)
5. How many years have you and your partner been together
living together - not married _____ YEARS Not applicable ☐
married _____ YEARS Not applicable ☐
TOTAL _____ YEARS
6. Approximately how many **hours per week** do you currently work for pay or go to school?
_____ HRS/WEEK
7. Which of the following best describes your financial situation:
- | | Me | My partner | Total Family Income |
|----------------------|-----------------------|-----------------------|-----------------------|
| Less than \$10,000 | ☐ | ☐ | ☐ |
| \$10,000 to \$19,999 | ☐ | ☐ | ☐ |
| \$20,000 to \$29,999 | ☐ | ☐ | ☐ |
| \$30,000 to \$39,999 | ☐ | ☐ | ☐ |
| \$40,000 to \$49,999 | ☐ | ☐ | ☐ |
| \$50,000 to \$59,000 | ☐ | ☐ | ☐ |
| \$60,000 to \$69,999 | ☐ | ☐ | ☐ |
| \$70,000 to \$79,999 | ☐ | ☐ | ☐ |
| \$80,000 to \$89,999 | ☐ | ☐ | ☐ |
| \$90,000 to \$99,999 | ☐ | ☐ | ☐ |
| \$100,000 or more | ☐ | ☐ | ☐ |

8. Which of the following categories best fits the work you do

- | | |
|----------------|-----------------------|
| Managerial | ☐ |
| Professional | ☐ |
| Technical | ☐ |
| Administrative | ☐ |
| Clerical | ☐ |
| Retail | ☐ |
| Other | ☐ |

9. Ethnicity _____

10. How did you hear about the Co-Parenting Study?

- Poster in a community building (e.g., museum) ☐
- Media (e.g., newspaper) ☐
- Daycare ☐
- Friend ☐
- Other ☐

If you have any further comments about the ways you work together as a family, please write them here.

COMMENTS:

•

•

•

•

•

THANK-YOU VERY MUCH!

Appendix G

Dyadic Adjustment Scale - Satisfaction Subscale (Spanier, 1976)

Thinking about your relationship with your partner, please indicate below the frequency with which the following occurs.

	All the time 0	Most of the time 1	More Often than not 2	Occa- sionally 3	Rarely 4	Never 5
1. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
2. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
3. In general, how often do you think that things between you and your partner are going well?	0	1	2	3	4	5
4. Do you confide in your mate?	0	1	2	3	4	5
5. Do you ever regret you married? (Or lived together)	0	1	2	3	4	5
6. How often do you and your partner quarrel?	0	1	2	3	4	5
7. How often do you and your mate "get on each other's nerves"?	0	1	2	3	4	5
8. How often do you kiss your mate?	Every Day 0	Almost Every day 1	Occa- sionally 2	Rarely 3	Never 4	

9. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "Happy", represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.



Extremely	Fairly	A Little	Happy	Very	Extremely	Perfect
Unhappy	Unhappy	Unhappy		Happy	Happy	

10. Which of the following statements best describes how you feel about the future of your relationship? (Check one)

- _____ I want desperately for my relationship to succeed, and *would go to almost any length* to see that it does.
- _____ I want very much for my relationship to succeed, and *will do all I can* to see that it does.
- _____ I want very much for my relationship to succeed, and *will do my fair share* to see that it does.
- _____ It would be nice if my relationship succeeded, but *I can't do much more than I am doing* now to help it succeed.
- _____ It would be nice if it succeeded, but *I refuse to do any more than I am doing* now to keep the relationship going.
- _____ My relationship can never succeed, and *there is no more that I can do* to keep the relationship going.

Appendix H

Advertisement

University of Ottawa  Université d'Ottawa



RESEARCH ON FAMILY RELATIONSHIPS

RECEIVE \$30

DO YOU AND YOUR PARTNER:

- ✓ EACH WORK AT LEAST 25 HOURS/WEEK?
- ✓ HAVE AN OLDEST CHILD 2-4 YEARS OLD?
- ✓ BOTH WANT TO PARTICIPATE IN
RESEARCH IN FAMILY PSYCHOLOGY?

PLEASE CALL / E-MAIL:

(613) 562-5800 ext. 4462

family@uottawa.ca

Appendix I

Telephone Protocol for Returning Parents' Calls to the Family Psychology Lab

Hello, may I speak with Mr(s)_____ please? Hello Mr(s)_____, my name is _____. I'm calling in response to the message you (your partner) left for us about the University of Ottawa's Co-Parenting Study. I understand that you are interested in hearing more about what the study is about and what would be involved if you and your partner were to agree to participate?

Once individual acknowledges... go on

The study is about how dual-income families with young children meet the challenges of family life. Participation in the study involves taking part in a brief interview about parenting and completing a questionnaire asking parents about the ways they work together in caring for their child. Each family receives \$30 for participating. *Is it something that would interest you?*

(If no) Thank you for your time. Goodbye.

(If yes) We are looking for a specific group of parents. Is it OK with you if I ask you some questions to see if you fit the description?

(If no): Would there be a better time for me to call back?

(If yes): Write down the time, date, name, and number to call. Thank you very much - I'll call you back then.

(If no): OK. Sorry to have disturbed you. Bye.

(If yes): go to **CRITERIA**

CRITERIA

1) Are you currently living with your spouse/partner?

If yes: Go to question 2

If no: I'm sorry, but we are looking for parents who are currently living with a spouse/partner. Thank you for your interest in the study.

2) Do you currently have an eldest child between the ages of 2 and 5 years living in your home?

If yes: Go to Question 3.

If no: I'm sorry but we are looking for parents who have an eldest child between the ages of 2 and 5 living with them. Thank you for your interest in the study.

3) Are you currently employed (e.g., working for pay) 20 or more hours per week?

If yes: Go to question 4

If no: Are you a full-time student?

If yes: Go to question 4.

If no: I'm sorry but we are looking for employed parents or full-time students. Thank you for your interest in the study.

4) Is your spouse/partner currently employed 20 or more hours per week?

If yes, Go to question 5.

If no: Is your partner a student?

If yes, Go to question 5.

If no: I'm sorry but we are looking for parents who have partners who are employed or are students. Thank you for your interest in the study.

5) Do you think your partner would consider taking part in the study with you?

If yes participant is eligible. Continue with PROTOCOL.

If no: I'm sorry but we are looking for families in which both parents are willing to participate. Thank you for your interest in the study.

PROTOCOL

You and your partner are eligible to participate. Let me tell you a little about how we would proceed:

If you both agree to take part, we will schedule a convenient time for the interview. You can either come to our office at the University of Ottawa, or if you prefer, I can come to your home. If this is not convenient, we can also arrange to do the interview by telephone. During the interview, I'd like to ask you and your partner questions individually about your parenting. That would take about 8-10 minutes each.

The second part involves responding to a questionnaire. Depending on your preference for the interview; whether you prefer to come into the university, have a researcher come to your home,

or do the interview by telephone, we will make arrangements to get a questionnaire for each parent to you. The questionnaire asks you about your relationship with your partner, how you see your child's behaviour, how you are feeling as an individual, as a parent, and as a partner, as well some background information. The responses you give will be kept in strictest confidence. To remain anonymous, we ask that you not to put your name on the questionnaire. It should take approximately 20 minutes to complete the questionnaire. You are, of course, free to leave any question blank.

What option would be more convenient for you: coming to the university, having a researcher come to you, or doing the telephone interview?

If coming to the university is chosen:

Let's set an appointment then. I am available to meet you _____ (Find an appointment that works for the family). You will find the family psychology research office at 120 University on the 6th floor (Provide additional details about directions specific to the route they will be taking). I look forward to meeting with you and your partner. See you on _____ (Repeat appointment). Goodbye.

If having a researcher come to you is chosen:

Let's set an appointment then. A researcher is available on _____ (Find an appointment that works for the family). Could you give me your address, please... (Record coordinates). Thank you, I look forward to meeting with you and your partner. See you on _____. (Repeat appointment). Goodbye.

If prefer to do the telephone interview:

Let's set an appointment then. What would be a good time for you? (Find an appointment that works for the family). Could you give me your address, please, so that I can send the questionnaires to you and your partner by mail? (Record coordinates). Thank you. You should receive the questionnaires within the next few days. We will include a self-addressed stamped envelope so that you can mail the questionnaire back to us later. Once the interviews are done and we have received your completed questionnaires, we will mail you \$30. Thank You again. I will call you on _____ (Repeat appointment) for the telephone interview. Goodbye.

Appendix J

Consent Form

Catherine Lee, Ph.D., C. Psych., Karen Bax, B.A., and Christine Beauregard, B.A.,
613-562-5800, extension 4462 (1)

I, _____, am interested in participating in this study on families with young children which is being conducted by Dr. Catherine Lee, Karen Bax, and Christine Beauregard of the School of Psychology at the University of Ottawa. **The purpose of this study is to find out more about how parents work together in caring for their children.**

If my partner and I choose to take part in the study, my participation will involve taking part in a 10-minute interview and completing a questionnaire which should take about 30 minutes. *The questionnaire asks about my relationship with my partner, how I see my child's behaviour, how I feel as an individual, as a parent, and as a partner, as well some background information.* These questionnaires will be identified by a code number, they will be locked in the researcher's lab and only researchers involved with this project will have access to them. No personal information will be disclosed. I understand that my partner and I are expected to complete the questionnaires separately.

I understand that my partner and I will each receive \$5 when we individually complete the interview and another \$5 when we individually complete the questionnaire. By both completing the interview and questionnaire we will jointly receive an additional \$10 (for a total payment of \$30 combined).

I understand that participation in the study involves no risk. I understand that for most participants, the only discomfort is the inconvenience of the time to complete the questionnaire. I have been given a list of agencies providing services to couples and families, so that if I am experiencing marital or parenting difficulties, I will be aware of the resources that may be available to me and my family.

My participation is voluntary and I am free to withdraw at any moment without any penalty. If I am uncomfortable with any question, I may leave it blank. I have received assurance that the information I provide will be kept strictly confidential. To remain anonymous I will *not* put my name on the questionnaire. There are two copies of this consent form, one which the researchers keep and one which I keep. If I have any questions, I may call Dr. Catherine Lee at 613-562-5800, extension 4462 (1).

PARTICIPANT'S SIGNATURE: _____ **DATE:** _____
RESEARCHER'S SIGNATURE: _____ **DATE:** _____

I wish to receive a summary of the results of this study which will be available in January 2001 at the following address:

Appendix K

Cover Letter

The Co-Parenting Study: Directions for Parents

Thank you for agreeing to participate in the Co-Parenting Study. Here are some important directions for participation given that you will be completing the questionnaires in the absence of researchers.

1. Because independence of information from mothers and fathers is **VERY** important for this research (e.g., we would like to learn about the *individual* perspectives of fathers and mothers), it is very important that you **PLEASE NOT** discuss your answers with each other until after you have answered all of the questions.
2. There are two copies of the consent form for each parent. Could you please sign and keep one copy (see the top right hand corner, labelled: "Participant Copy") and **return the other signed copy (the one labelled "Lab Copy") to us with your completed questionnaires**. For your convenience, a stamped self-addressed envelope is provided so that you can return them by mail.

Participation also involves a brief telephone interview (5-10 minutes each). To schedule the telephone appointment, please call the Family Psychology Research Lab at the telephone number provided below and leave your number and the time of day when it is best to try to reach you. Otherwise, a researcher will be contacting you soon to schedule a time that is convenient for you. Once we have received the completed questionnaire and the interview has been done, we will send you the \$30.00 by mail. Therefore, please provide us with your mailing address.

Thank you so much for participating!!! The information you are providing will help advance the field of family psychology and will serve to increase understanding about what families can do to increase resiliency in the face of the wonderful yet challenging experience of parenting!!!

Catherine Lee, Ph.D., C. Psych., Karen Bax, B.A., & Christine Beauregard, B.A.
University of Ottawa

Appendix L

List of Agencies that Provide Psychological Services for Couples and Families

THANK-YOU! THANK-YOU! THANK-YOU! THANK-YOU! THANK-YOU! THANK-YOU!

THANK-YOU FOR PARTICIPATING IN THE CO-PARENTING STUDY!

A sincere thank-you for helping to further research in the area of family psychology! The time and effort you and your family gave are greatly appreciated. As mentioned earlier, here is a list of agencies that provide services to couples and families. Should you have any further questions regarding the study, please do not hesitate to call us (562-5800 ext. 4462).

List of Agencies that Provide Psychological Services for Couples and Families

Centre for Psychological Services University of Ottawa 613-562-5289	Sliding fee scale
Catholic Family Service of Ottawa Carleton 613-233-8478	Sliding fee scale
Family Service Centre 613-725-3601	Sliding fee scale
Jewish Family Services 613-722-2225	Sliding fee scale

Appendix M

Telephone Protocol for Reminder

Hello, may I speak to _____ ? This is _____ from the University of Ottawa Co-Parenting Study (**remind participant who you are if s/he seems hesitant**).

As we have not yet received your questionnaire, I'm calling to find out if you have if you have any questions.

If participant has mailed questionnaire: Thank you very much, we appreciate your help and will mail the money to you when the questionnaire arrives. Your participation will help us better understand how parents work together in caring for their children. Thanks Again!

If participant has not mailed questionnaire: We appreciated your help in taking part in the interview. We understand that your life is very busy and would be grateful if you would send in the questionnaire.