

CLARIFYING THE ASSOCIATION BETWEEN INTER-PARENT CHILDREARING
DISAGREEMENT AND CHILD PROBLEMS:
THE ROLE OF PARENTING EFFECTIVENESS AND THE CONTENT OF
DISAGREEMENTS

by

MANDY YAO-MIN CHEN

Hon.B.Sc., University of Toronto, 2003
M.A., The University of British Columbia, 2005

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(Psychology)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

July 2009

© Mandy Yao-Min Chen, 2009

Abstract

Parents who disagree frequently about childrearing issues have been shown consistently to have children with greater emotional and behavioral problems. Despite these significant relationships, little is known about the mechanism through which inter-parent childrearing disagreements are associated with negative child outcomes. The purpose of this dissertation was therefore to examine whether disagreements between parents on childrearing issues are associated with negative child outcomes after controlling for parenting effectiveness, and whether inter-parent disagreements about parenting behaviors and parenting goals are independently associated with child problems. A community sample of 160 couples with a first-born child (86 boys and 74 girls) between 2 and 5 years of age participated in the study. Mothers and fathers independently completed an Internet survey about their family's characteristics, parenting behaviors and goals in response to child misbehaviors, general parenting practices, marital conflict, frequency of childrearing disagreements, and child's functioning. Results showed that inter-parent childrearing disagreement continued to account for unique variance in child problems even after controlling for family income, parents' general marital satisfaction and parenting effectiveness. Parents' disagreement in parenting behaviors, but not parenting goals, was significantly associated with negative child behavior at the bivariate level (although not in regression models controlling for parenting effectiveness). These relationships were more consistent for child externalizing than internalizing problems. These findings suggest that in both research and clinical practice, it is important to not just attend to the parenting skills of individual parents in isolation, but also to assess how well parents are able to negotiate and resolve disagreements regarding childrearing issues.

Table of Contents

Abstract	ii
Table of Contents	iii
List of Tables	v
List of Figures	vii
Acknowledgements	viii
Dedication	ix
Introduction	1
The Effects of Parenting on Child Functioning	1
Mothers and Fathers: Differences in Parenting	3
Coparenting	4
Review of Literature on Childrearing Disagreement	8
First Research Question: The Role of Parenting Effectiveness	13
Second Research Question: Content of Childrearing Disagreement	18
Parenting Goals	21
Childrearing Disagreement in Parenting Goals vs. Parenting Behaviors	22
The Present Study	24
Method	24
Participants	24
Measures	27
First Research Question: The Role of Parenting Effectiveness	27
Second Research Question: Content of Childrearing Disagreement	30
Procedure	34
Internet Survey	35
Results	37

Data Inspection.....	37
Description of Scores	38
Comparison of Mothers vs. Fathers	40
Comparison of Boys vs. Girls	41
Bivariate Correlations between Parental Disagreement, Marital Adjustment, and Parenting.....	43
First Research Question: The Role of Parenting Effectiveness	44
Child Externalizing Problems	46
Child Internalizing Problems	47
Child Externalizing Problems (Cross-Informant Analyses)	48
Child Internalizing Problems (Cross-Informant Analyses)	49
Second Research Question: Content of Childrearing Disagreement.....	50
Discussion.....	54
The Role of Parenting Effectiveness	55
The Content of Disagreement.....	61
Child Gender	65
Limitations.....	67
Conclusions and Future Directions	68
References.....	72
Appendices.....	110
Appendix A: Child-Rearing Disagreement Scale (CRD).....	110
Appendix B: Parenting Practices Scale (PPS).....	112
Appendix C: Dyadic Adjustment Scale (DAS).....	121
Appendix D: Parenting Behaviors and Goals Questionnaire (PBGQ).....	125
Appendix E: UBC Research Ethics Board's Certificate of Approval.....	128

List of Tables

Table 1: Demographic Characteristics of the Sample.....	87
Table 2: Summary of the Questionnaire Acronyms.....	92
Table 3: Mean Levels of Inter-Parent Agreement on Parenting Behaviors and Goals, Childrearing Disagreement, Parenting Practices, Marital Adjustment, Child Problems, and Impression Management Tendency.....	93
Table 4: Bivariate Correlations between Parents' Agreement in Parenting Behaviors and Goals, Childrearing Disagreement, Marital Adjustment, and Parenting Practices.....	96
Table 5: Bivariate Correlations between Childrearing Disagreement, Parenting Practices, Marital Adjustment, and Child Behaviors.....	97
Table 6: Regression Analyses Predicting Child Externalizing Problems from Parenting Effectiveness and Childrearing Disagreement.....	98
Table 7: Regression Analyses Predicting Child Internalizing Problems from Parenting Effectiveness and Childrearing Disagreement.....	99
Table 8: Regression Analyses Predicting Externalizing Problems with Different Parents Reporting on the Predictors and the Child Outcomes.....	100
Table 9: Regression Analyses Predicting Child Internalizing Problems with Different Parents Reporting on the Predictors and the Child Outcomes.....	101
Table 10: Bivariate Correlations between Parental Disagreement in Parenting Behaviors, Parental disagreement in Parenting Goals, and Child Problems.....	102
Table 11: Regression Analyses Predicting Child Externalizing Problems from Parenting Effectiveness and Parental Disagreement in Parenting Behaviors.....	103

Table 12: Regression Analyses Predicting Child Internalizing Problems from Parenting

Effectiveness and Parental Disagreement in Parenting Behaviors.....104

List of Figures

Figure 1: The relationships between coparenting and other family variables.....	5
Figure 2: Hypothesized relationships between childrearing disagreement, ineffective parenting, and child problems.....	16
Figure 3: Relationships between parents' scores on the Childrearing Disagreement Scale and the Parent Practices Scale.....	105
Figure 4: Relationships between parents' scores on the Childrearing Disagreement Scale and children's Externalizing scores on the Child Behavior Checklist.....	106
Figure 5: Relationships between parents' scores on the Childrearing Disagreement Scale and children's Internalizing scores on the Child Behavior Checklist.....	107
Figure 6: Relationships between parents' scores on the Parenting Practices Scale and children's Externalizing scores on the Child Behavior Checklist.....	108
Figure 7: Relationships between parents' scores on the Parent Practices Scale and children's Internalizing scores on the Child Behavior Checklist.....	109

Acknowledgements

I am immensely grateful for the mentorship I received from my advisor, Dr. Charlotte Johnston, on this work and throughout my graduate career. My accomplishments would not have been possible without her trust and guidance. I would also like to thank the faculty members who served on my committee – Drs Susan Birch, Jim Enns, Debbie Giaschi, and Sheila Woody – for their insightful suggestions on the draft of this dissertation. Special thanks also go to Ms. Ashley Caringi and Ms. Randall Gillis for their help with recruitment of participants, and Mr. Wayne Tamagi for providing technical assistance on creating the website for data collection.

Dedication

I dedicate this work to my parents, whose nurturance and support laid the foundation on which I have built my dreams; and to my husband, Mark, whose love and encouragement are what make the pursuit of those dreams meaningful. A special mention must also be made of my beloved dog, Shiya, whose companionship and relentless request for play kept me balanced during the completion of this work.

Introduction

The goal of this study was to clarify the relationship between inter-parental disagreement about childrearing issues and negative child outcomes. The study consisted of two parts. First, I examined whether childrearing disagreement was related to child problems after controlling for negative parenting behaviors. Second, I differentiated parental disagreement about parenting goals from parental disagreement about parenting behaviors, and examined whether each was related independently to child internalizing and externalizing problems. I will begin this dissertation with a general review of the effects of parenting on children, and the differences in parenting behaviors between mothers and fathers. I will then review the literature on coparenting, as well as previous studies that have examined the link between childrearing disagreement and child behavior problems. Finally, I will discuss the rationale behind the two research questions, describe the methods used to address them, and discuss the findings and their implications.

The Effects of Parenting on Child Functioning

Psychological problems in children have far-reaching implications not only for the children and the individuals directly involved in the children's lives, but also for society at large. Many decades of research effort have been devoted to uncovering factors that may cause or perpetuate abnormal functioning in children. Theories that emphasize the importance of nature, or inborn characteristics, have focused on the effects of genes, neuroanatomy, and temperament, while theories that emphasize the importance of nurture have focused on the influence of socialization and culture. Specific factors that have been identified in the literature as playing a role in children's mental health include the child's biological makeup (e.g., genetics, neurological anomalies) (Serene, Ashtari, Szeszko, & Kumra, 2007), stressful life experiences

(e.g., poverty, trauma) (Grant, Compas, Thurm, McMahon, & Gipson, 2004), and family functioning (e.g., attachment, parenting) (Goodman & Gotlib, 1999; Wamboldt & Wamboldt, 2000). Among these variables, parenting is one of the most heavily researched.

The construct of parenting can be broadly defined as the socialization process by which caregivers prepare their children with the necessary skills to adapt to their physical and social environments (Bornstein, 2002). It encompasses all the behaviors (e.g., caregiving, disciplining, monitoring), cognitions (e.g., beliefs, attributions, expectations), and emotions (e.g., warmth, anxiety, satisfaction) associated with this process. Over the years, the conceptualization of parental influence has evolved quite drastically, from Freud's portrayal of parenting as having unidirectional and almost complete influence over children's development, to the more modern perspective of parents and children having mutual and transactional (i.e., bidirectional and reciprocal) influences on each other (Holden & Miller, 1999). The scope of parenting theories has also diversified over the years from a focus on parents' role in shaping children's behavior (Vygotsky, 1978), to accounts that include such facets as parenting styles (Baumrind, 1986), the quality of attachment between parents and children (Ainsworth & Bowlby, 1991), and the social cognitions underlying parents' behaviors (Bandura, 1997; Sigel, McGillicuddy-DeLisi, & Goodnow, 1992).

From the many years of investigations, researchers have demonstrated that what parents do does in fact affect the developmental outcome of their children (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Ge et al., 1996; Kazdin, 1997). Furthermore, negative parenting behaviors (e.g., low parental warmth, harsh discipline), particularly when interacting with preexisting child characteristics or vulnerabilities, appear to contribute causally to

emotional and behavioral problems in children and adolescents (August, Realmuto, Joyce, & Hektner, 1999; Feinberg, Button, Neiderhiser, Reiss, & Hetherington, 2007; Galambos, Barker, & Almeida, 2003). This contextual framework supports the importance of the current study of mothers' and fathers' parenting in relation to child problems.

Mothers and Fathers: Differences in Parenting

Whereas most of the earlier research on parenting was conducted exclusively with mothers, in the past 30 years, researchers have begun to acknowledge and examine the role of fathers in children's lives (Cassano, Adrian, Veits, & Zeman, 2006; Phares, Lopez, Fields, Kamboukos, & Duhig, 2005). Today, fathers are recognized as important contributors to children's social, emotional and cognitive development. Although overall mothers and fathers tend to influence children in similar ways (Lamb & Tamis-Lemonda, 2004), there is also evidence that fathers' contributions are qualitatively different from those of mothers (for reviews see Lamb, 1997; Parke, 2002).

In the domain of parenting behaviors, for example, studies have revealed that fathers play more with children (Lamb, 1977; Russell & Russell, 1987) and are more active and physical in their play (MacDonald & Parke, 1984) than mothers. Fathers also tend to give fewer commands to their children (Dumas & Lechowicz, 1989), interact with children in more gender-stereotyped ways (Siegal, 1987), and in contrast to mothers, contribute to children's attachment security more through their play sensitivity than through their caregiving sensitivity (Grossman et al., 2002). Other studies have examined differences in mothers' and fathers' parenting cognitions, including variables such as expectations, beliefs, and attitudes regarding children and child-rearing. For example, studies have found that fathers hold higher academic and athletic expectations for children than do mothers (Richman & Rescorla, 1995), and perceive parents'

roles in providing care versus stimulating play as less distinguishable than mothers (Beitel & Parke, 1998). Interestingly, in dealing with children's emotions such as sadness, although fathers are more likely than mothers to dismiss their children's emotion, they also seem to be more accepting than mothers of their children's ways of coping with distress (Cassano, Perry-Parrish, & Zeman, 2007).

These studies, while informative about parenting differences between mothers and fathers at a group level, do not reveal the implications that these differences may have within individual families. In other words, how do mothers and fathers within the same family negotiate the parenting task as a team, given the high likelihood that they will have at least some differences in their approaches to parenting? In addition to studying the behaviors of individual parents in isolation, therefore, some researchers have adopted a more systemic perspective and examined the impact of the coparenting relationship on child functioning (Abidin & Brunner, 1995; Belsky, Woodworth, & Crnic, 1996; Feinberg, Kan, & Hetherington, 2007).

Coparenting

The concept of coparenting has been variously defined in the literature as encompassing a range of interparental processes. The dimensions that have been proposed include: the extent to which partners either support or undermine each other's parenting efforts; how partners negotiate the division of childcare duties; the degree of agreement or disagreement between partners about childrearing issues; and how partners manage interparental conflicts and maintain boundaries between family subsystems (Belsky, Crnic, & Gable, 1995; Feinberg, 2003; McHale, 1995; Schoppe, Mangelsdorf, & Frosch, 2001). I will return later to the problems posed by this heterogeneity of definitions. However defined, the coparenting process is intimately related to both the marital relationship and dyadic parent-child relations; yet at the same time, it also has

been proposed as conceptually distinct from both, given its triadic nature (Gable, Belsky, & Crnic, 1992; Hayden, et al., 1998). That is, although the concept of coparenting addresses primarily the exchange and coordination between the parents as a couple, the process is distinct from purely marital interactions which may not necessarily include or be related to the child. On the other hand, although the very task of engaging and interacting with the child is an integral part of coparenting, the inclusion of both parents necessarily adds a layer of complexity to the picture that is not captured when mother-child or father-child relationships are studied as dyadic variables (Schoppe et al., 2001).

Although the study of coparenting has not had a long history, existing literature suggests that the coparenting relationship is an important variable that bears significant associations with various dimensions of family functioning (Belsky, Woodworth, & Crnic, 1996; Feinberg, 2003). A schematic summarizing this body of research and illustrating the centrality of the coparenting relationship is depicted in Figure 1. For the sake of simplicity, the directions of the links are drawn to represent the results of the studies to be reviewed below. It should be noted however that, as with most variables characteristic of family interactions, the variables depicted in the figure most likely interact in a transactional rather than unidirectional manner.

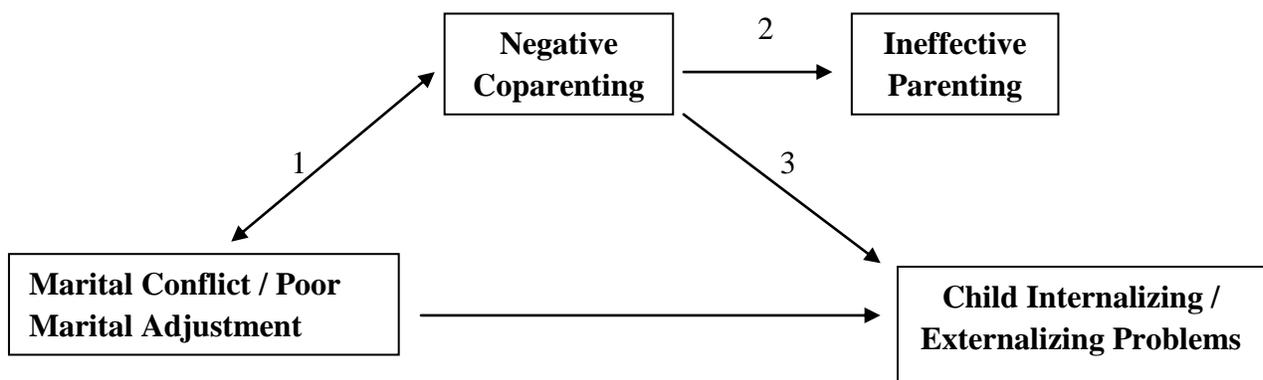


Figure 1. The relationships between coparenting and other family variables.

In regards to marital adjustment (see link 1 in Figure 1), for example, parents who were experiencing greater marital conflict were observed to engage in more hostile and competitive coparenting behavior in a play session together with their infant (McHale, 1995). Furthermore, in a longitudinal study, undermining coparenting behavior (e.g., exchanging sarcastic remarks about each other's parenting, showing displeasure while observing partner interact with child) predicted subsequent marital conflict even after the initial level of marital conflict was controlled (Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004). Beyond being related to marital conflict, as depicted by link 1 in Figure 1, coparenting has also been shown to mediate the link between poor marital adjustment and negative parenting behavior (links 1 and 2) both cross-sectionally (Margolin, Gordis, & John, 2001), and longitudinally (Bonds & Gondoli, 2007; Floyd, Gilliom, & Costigan, 1998). Together, these results suggest that negative coparenting not only contributes to greater marital conflict, but is also one of the pathways by which marital problems exert their influence on parenting behaviors.

With respect to child functioning, most studies have focused on the broad categories of child externalizing (e.g., noncompliance to parental commands, hyperactivity, aggression) and internalizing problems (e.g., depressed mood, anxiety, somatization) as the outcome variables. Specifically, supportive or positive coparenting has been shown to be positively related to children's academic abilities, and to prospectively predict fewer externalizing problems in children (McHale, Rao, & Krasnow, 2000; Schoppe et al., 2001). On the other hand, as depicted by link 3 in Figure 1, negative coparenting has been linked to both greater internalizing and externalizing problems in preschool children (McConnell & Kerig, 2002; Schoppe et al., 2001). More importantly, research in recent decades has found coparenting to contribute to child functioning above and beyond the effects of marital conflict – the variable that was once

proposed to be the best familial predictor of child behavior problems (see review in Feinberg, 2003; Katz & Low, 2004; McHale & Rasmussen, 1998). Overall, these results suggest that the quality of the coparenting relation is an important predictor of child functioning, and it appears to bear a unique relationship with child outcome that is not accounted for by marital conflict.

In sum, this brief review of studies suggests that it is important for researchers to move beyond the study of individual parents, parent-child relationships, and the marital relationship, and to examine the whole family as the unit of analysis. In particular, these results suggest that in order to better understand the determinants of child functioning, it is necessary for researchers to consider how parents negotiate the parenting task as a team. The current study intended to contribute to this line of research by addressing one specific dimension of the coparenting construct – parental disagreement regarding childrearing issues – and how it relates to child problems.

It is worth noting that, although the literature on childrearing disagreement is not large, support for the importance of this variable as a predictor of child outcome can also be gleaned from the literature on marital conflict. As already noted, there are a substantial number of studies that have documented a significant association between marital conflict and child behavior problems (Grych & Fincham, 1990; Porter & O’Leary, 1980; also see review in Cumming, 1994). Although many of these studies do not specify the topics of the marital conflicts, there is evidence which suggests that issues related to children and childrearing are among the most common sources of conflict between parenting couples. Specifically, in one recent study, parents were asked to keep a home diary record of the topics discussed during each marital conflict for a 15-day period. Results showed that up to 44% of the marital conflicts were focused on child

issues (Cummings, Goeke-Morey, & Papp, 2004). Therefore, it is possible that many of the studies on marital conflict are, in fact, studies of childrearing disagreement. The fact that marital conflict is consistently linked to negative child outcome, combined with the finding that children are more distressed by parental conflicts that are child-related than conflicts that are nonchild-related (Davies, Forman, Rasi, & Stevens, 2002), thus lend further support to the thesis that childrearing disagreement is an important variable that deserves greater research attention.

Review of Literature on Childrearing Disagreement

The following review focuses on studies that have examined the link between childrearing disagreement and child outcome (i.e., link 3 in Figure 1). The first study that systematically examined this relationship was published in 1981 by Block, Block, and Morrison. Within the context of studies linking general marital discord to child behavior problems, these researchers sought to determine whether parental disagreements specifically about child-rearing issues would be similarly related to child outcome. Childrearing disagreement was operationalized as the degree of agreement between mothers' and fathers' independent reports of their own parenting practices. Specifically, mothers and fathers independently completed the Child-rearing Practices Report (CRPR; Block, 1965), and the correlation coefficient between each pair's responses was used as the parental agreement index. The CRPR is a 91-item measure that assesses a broad range of parenting practices including parenting beliefs, philosophies, and specific behaviors (the ambiguity of the constructs measured in this and subsequent studies will be summarized and discussed later). Using this method, Block et al. found that parents of 3-year-old children who were more in agreement with each other in their reported parenting practices, had boys with better social, impulse-control, and coping abilities both concurrently, and 4 years after the initial assessment (with correlations ranging between .35 and .58). Interestingly, for

girls, parental agreement was not correlated with concurrent child functioning, and in fact predicted poorer impulse-control skills 4 years later (with a correlation of .39). This was the first study to show that parents' agreement about childrearing issues is related to children's functioning, and it also provided preliminary evidence that the pattern of association may be different for boys and girls.

Since the publication of the Block et al. (1981) study, there has been a series of studies that have investigated the link between childrearing disagreement and child outcome. Although the literature is not large, the main findings have been generally consistent. For example, Snyder, Klein, Gdowski, Faulstich, and LaCombe (1988) asked mothers and fathers to report on their childrearing disagreements using the Spousal Conflict over Childrearing subscale (CCR) of the Marital Satisfaction Inventory (Snyder, 1981). This subscale includes a series of true-false statements regarding marital conflicts over childrearing issues such as "My spouse and I seem to argue more frequently since having children", and "My spouse doesn't assume his (her) fair share of taking care of the children". Results showed that parents' conflict over childrearing was positively correlated with both internalizing and externalizing problems in children (with correlations ranging from .26 to .37). The pattern of results was similar for boys and girls, and across three age groups: 3-8 years, 9-12 years, and 13-17 years. More interestingly, these researchers found that whereas couples' conflict over childrearing correlated significantly with child outcome, other marital variables such as global marital distress or spousal conflict over non-childrearing issues did not. These authors concluded that earlier findings on marital discord and child outcome may in fact reflect the specific effects of parental discord regarding childrearing issues rather than global marital distress. However, the finding was challenged by the results of Jenkins and Smith (1991) who found, in a community sample of families with 6- to

7-year-old children, that although childrearing disagreement was significantly correlated with both mothers' and fathers' reports of children's internalizing and externalizing problems (with correlations ranging between .22 and .34), the relationships were no longer significant after controlling for the frequency of parents' overt marital conflict. The authors did not examine the effects of child gender in this study. Although these findings appear somewhat inconsistent with those of Snyder et al., it is important to note that Jenkins and Smith's measure of overt marital conflict did not distinguish between child-related and non-child-related topics. It is therefore possible that childrearing disagreement no longer correlated with child outcome after controlling for overt marital conflict because these two predictors (which were significantly correlated at $r = .48$) overlapped in the variance that they shared with the child outcome variables. Moreover, Jenkins and Smith assessed childrearing disagreement by asking parents to report on the frequency of disagreements in specific areas of discipline, children's education, and everyday childcare (e.g., what the child should wear). The discrepancy in how childrearing disagreement was operationalized in the two studies might also have contributed to the different findings.

Following this same line of research, in 1991, Jouriles et al. published a study which sought to further clarify the link between marital discord and child outcome by targeting parents' childrearing disagreement. As part of this study, Jouriles et al. developed a new measure of childrearing disagreement – the Childrearing Disagreement Scale (CRD) – which contains 21 items that were proposed to reflect common topics of childrearing disagreements between parents. Mothers and fathers were asked to indicate, using a six-point Likert scale, how frequently each disagreement had occurred in the past 6 months. Sample items include “my spouse has irritated me by letting our child make a mess all over the house” or “pushing our child to learn too much at an early age”. Consistent with previous studies, these authors found that

childrearing disagreement correlated significantly with both internalizing and externalizing problems in 4- to 6-year-old boys (with correlations of .37 and .20 respectively). Furthermore, parental childrearing disagreement continued to relate significantly to boys' internalizing problems after controlling for parental reports of general marital adjustment or children's overall exposure to marital conflict. The relationship between childrearing disagreement and boys' externalizing problems was not significant, however, after accounting for the two marital variables. This was the first study to demonstrate that parents' disagreement about childrearing does make a unique contribution to predicting at least certain aspects of negative child behavior above and beyond the contributions of general marital adjustment.

Similar results linking childrearing disagreements to child behavior have been obtained in families of children and youth at different ages and with children with varying degrees of psychological problems. For example, Dadds and Powell (1991) compared a group of 3- to 8-year-old community children with a group that had been diagnosed with oppositional defiant disorder or conduct disorder. Mothers were asked to complete the Parent Problem Checklist (PPC; Dadds & Powell, 1991) which asks respondents to indicate whether, in the last month, parents ever disagreed about rules or discipline for children's misbehavior, had open conflict about childrearing issues, or undermined each other's parenting efforts. Their results showed that childrearing disagreement continued to account for significant variance in child aggression in both groups even after controlling for marital adjustment, child age, and SES (β s for childrearing disagreement ranged from .45 to 1.47 in the full model¹); this finding was not moderated by child

¹ β is the standardized regression coefficient that represents the amount of change in the dependent variable for one unit of change in the independent variable, when all other control variables are held constant. The interpretation of the magnitude of the β s depends on the other variables included in each individual model. For the purpose of comparison, the β s for marital adjustment ranged from -.06 to .76 in the full model (Dadds & Powell, 1991).

gender. Childrearing disagreement also continued to account for significant variance in child anxiety after controlling for marital adjustment, child age, and SES for both the clinical and community samples of boys (β s for childrearing disagreement in the full model were .60 and -.30 respectively²), however results were not significant in either group of girls. In another study, Mahoney, Jouriles, and Scavone (1997) recruited parents of 4- to 9-year-old children who were seeking treatment for children's noncompliance to parental commands. Parents completed the CCR, a subscale of the Marital Satisfaction Inventory (Snyder, 1981), as the measure of childrearing disagreement. These researchers found that parental reports of childrearing disagreements continued to correlate significantly with children's externalizing, but not internalizing, problems after controlling for general marital adjustment (β s for childrearing disagreement in the full model predicting externalizing problems as reported by mothers and fathers were .20 and .24 respectively³). These results were not moderated by either child age or gender. Finally, King, Radpour, Naylor, Segal, and Jouriles (1995) recruited families of adolescents between 12 and 18 years of age who were residents of a psychiatric inpatient unit. Results showed that, after controlling for general marital adjustment, mothers' ratings on CCR accounted for 12% of the variance in adolescents' problem behaviors at school and 11% of the variance in adolescents' problem behaviors outside of school. These authors did not investigate whether the results were moderated by adolescent gender.

In summary, the studies that have examined the link between childrearing disagreement and child outcome have generally shown the following results. First, childrearing disagreement is

² β s for marital adjustment in the full model was .54 for the clinical sample of boys, and -.46 for the community sample of boys.

³ β s for marital adjustment in the full model predicting externalizing problems were .07 (mother-report) and -.13 (father-report) .

positively and moderately correlated with both internalizing and externalizing problems in children and youths of a wide range of ages, in both community samples of children, as well as those with clinical levels of problems. Second, these relationships are most often significant even with general marital adjustment controlled. Finally, the unique contribution of childrearing disagreements in predicting child outcome appears to be moderated to some extent by both child gender and the type of child behavior problems examined (i.e., internalizing vs. externalizing problems).

It is worth noting here that the majority of these studies are cross-sectional, and therefore are inconclusive with respect to the causal direction of the relationship. Although it is plausible that parental disagreement about childrearing issues could directly or indirectly cause behavior problems in children, it is probably also true that parents who have children with behavior problems have a harder time reaching agreements about how to parent their children. Thus, as iterated above, the relationship between these variables is most likely reciprocal. The main focus of this study is to further understand the distinctiveness of the construct of childrearing disagreement, rather than to address the directionality of relationships between childrearing disagreement and its correlates.

First Research Question: The Role of Parenting Effectiveness

Amidst the body of literature that has demonstrated convincingly that inter-parental childrearing disagreement is associated with child behavior problems, is an early study published by Deal, Halverson, and Wampler (1989) which argued for a slightly different interpretation of the relation between childrearing disagreement and child behavior problems. Specifically, these researchers took notice of Block et al. (1981)'s finding that parents who agreed with each other on childrearing issues were also the parents who used more supportive and inductive control

techniques, and who were low on authoritarianism. Deal et al. therefore questioned whether parental childrearing agreement is a distinct construct from effective or positive parenting, or whether childrearing agreement should instead be considered one of the defining features of effective parenting. In other words, is it the case that parents simply agree with each other more when both parties possess good parenting skills? Or, are parental agreement and parenting effectiveness two separate phenomena that may or may not occur together? To investigate this question, Deal et al. recruited a community sample of preschool children, and asked their mothers and fathers to independently complete the CRPR (Block, 1965), the same measure used by Block et al. to assess parents' childrearing disagreement. The same measure was also administered to 10 child development professionals and their responses were used to create a profile of effective parenting. These procedures thus generated three variables of interest: parents' childrearing agreement with each other, parents' childrearing agreement with the experts, and each individual parent's parenting effectiveness (defined as a parenting style that is highly positive and minimally authoritarian). Consistent with findings of other studies, inter-parental agreement was negatively correlated with child behavior problems. In addition, consistent with the findings of Block et al., parenting dyads who agreed with each other also tended to engage in more positive parenting practices (based on both self-report and observational measures), to use less authoritarian control techniques, and to show higher agreement with the effective parenting profile created by the experts. Most importantly, however, was the finding that after controlling for mothers' and fathers' parenting effectiveness, parental childrearing agreement was not significantly correlated with any measure of child behavior problems. These authors concluded that, at least in their sample, parental agreement about childrearing issues was not a meaningful within family phenomenon, but instead simply reflected parents' agreement with a social

standard of good parenting. That is, parents who reported similar parenting practices may not have been agreeing with each other as much as they simply were both practicing what is considered good parenting. Interestingly, while researchers have speculated about the possibility of agreement between parents with poor parenting practices and the implications of this for child outcomes (O'Leary & Vidair, 2005), thus far, this combination of poor parenting with high inter-parent agreement has not been documented in the literature.

Deal et al.'s (1989) findings raise an important question regarding the role of parenting effectiveness in the association between childrearing disagreement and negative child behaviors. As these authors demonstrated, parenting dyads who agreed on childrearing issues were also parents with knowledge of good parenting practices. Given the well-established relationship between ineffective parenting and child behavior problems (Patterson, Reid, & Dishion, 1992), it is reasonable to hypothesize that the relationship between childrearing disagreement and child behavior problems may in fact derive from the variance that is shared by childrearing disagreement and ineffective parenting. That is, childrearing disagreement may be associated with child behavior problems because parents who disagree with each other also tend to have poor parenting skills, which are independently predictive of child behavior problems. Interestingly, none of the studies on childrearing disagreement reviewed above controlled for parenting effectiveness despite Deal et al.'s findings. This is an important gap in the literature, because one cannot claim that childrearing disagreement is linked with child behavior problems without ruling out the possible role of parenting effectiveness in this relationship. The first goal of this study was therefore to use well established measures with solid psychometric properties to examine whether childrearing disagreement is associated with child behavior problems after controlling for the quality of parenting behaviors. Specifically, it was predicted that although

ineffective parenting may account for part of the relationship between childrearing disagreement and child problems (i.e., link 1 in Figure 2), the relationship between these two variables would remain significant (i.e., link 2 in Figure 2) even with ineffective parenting controlled.

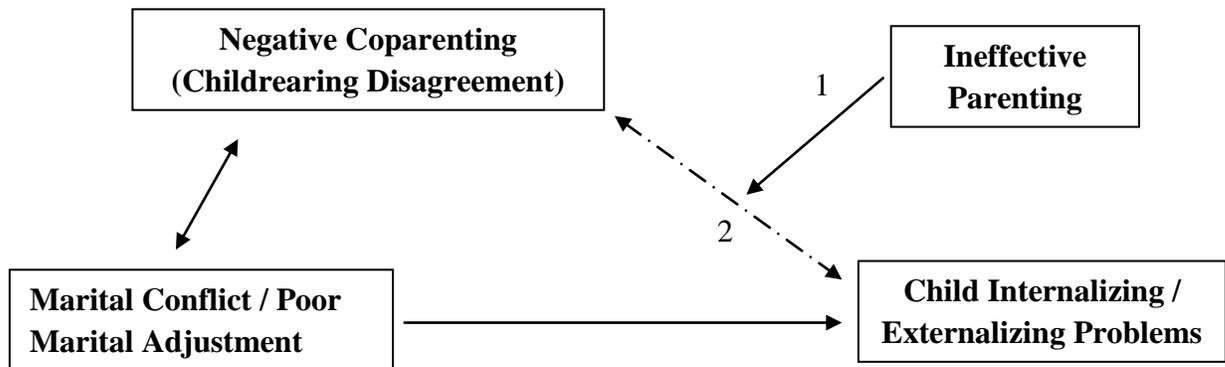


Figure 2. Hypothesized relationships between childrearing disagreement, ineffective parenting, and child problems.

This hypothesis is based on findings from a recent study by O’Leary and Vidair (2005) who investigated the role of overreactive parenting (i.e., a discipline style that is characterized by expressions of anger and irritability) in the relationship between childrearing disagreement and child behavior problems. These researchers asked a community sample of mothers and fathers with 3- to 7-year-old children to complete a six-item questionnaire that measured how frequently they disagreed about general aspects of childrearing and about specific responses to children’s misbehavior. Based on previous studies that found overreactive parenting to be related to both childrearing disagreement and child problems, these authors hypothesized that the association between childrearing disagreements and child problems would be accounted for by overreactive parenting. Consistent with findings reviewed above, these authors found that childrearing

disagreement was related to child behavior more proximally than marital adjustment. That is, childrearing disagreement always accounted for the relationship between marital adjustment and child behavior problems regardless of child gender, type of child behavior problems, and whether analyses were based on data reported by mothers or fathers. Somewhat in contrast to their hypotheses, on the other hand, was the fact that overreactive parenting only accounted for the link between childrearing disagreement and child behavior problems in three of the eight models tested. Specifically, overreactive parenting significantly accounted for the relationship in models that predicted girls' internalizing problems as reported by either mothers or fathers, and the model that predicted girls' externalizing problems as reported by mothers. Overreactive parenting did not significantly account for the relationship between childrearing disagreement and behavior problems in any of the models for boys. Thus, this study presented some evidence that overreactive parenting behavior accounts for some of relationship between childrearing disagreement and measures of child problems, but that the latter two variables remain related independently of the role of parenting.

Although O'Leary and Vidair (2003) found partial support for an association between childrearing disagreement and child problems, even with parenting behaviors included in their models, there are reasons to suspect that these findings may have in some ways underestimated the importance of parenting behaviors in this relationship. Specifically, overreactive parenting (the specific parenting behavior measured in their study) represents only one narrow dimension of parenting behavior, and other than the fact that it has been shown to relate to both child problems and childrearing disagreement, there is not a strong theoretical rationale for why this particular dimension of parenting would be the most likely parenting variable to account for the relationship between childrearing disagreement and child outcome. Instead, it seems likely that

when parents have disagreements about childrearing issues, several aspects of their parenting behaviors are affected (e.g., parenting consistency, involvement, positive engagement with their children). The same hypothesis would also apply if the causal direction were reversed. That is, if negative parenting was the result of child problems, one would still expect that multiple dimensions of parenting would be affected. Thus, the present study intended to examine whether the relationship between childrearing disagreement and negative child outcome will remain significant after controlling for parenting effectiveness as assessed by a more comprehensive parenting measure that covers multiple aspects of negative parenting behavior.

Second Research Question: Content of Childrearing Disagreement

As illustrated by the studies reviewed above, the construct of childrearing disagreement has been assessed using a variety of questionnaires. Although these questionnaires all claim to measure the construct of childrearing disagreement, each measure in fact operationalizes the construct somewhat differently. For example, the CRPR (Block, 1965) contains questions that reflect a mixture of constructs related to parenting, including parents' beliefs (e.g., "I don't think young children of different sexes should be allowed to see each other naked"; "I believe that a child should be seen and not heard"), specific parenting behaviors (e.g., "I sometimes forget the promises I have made to my child"; "I joke and play with my child"), parenting goals and expectations (e.g., "I expect my child to be grateful and appreciate all the advantages s/he has"; "I expect a great deal of my child"; "I encourage my child to be curious, to explore and question things"), and even parents' sense of enjoyment of their children (e.g., "I enjoy having the house full of children"; "I get pleasure from seeing my child eating well and enjoying his/her food"). Given such a wide range of dimensions assessed, when the correlation between mothers' and fathers' ratings on this measure is used as the index of childrearing disagreement, it is difficult to

interpret the meaning of this disagreement. That is, are parents in disagreement regarding their goals as parents, or in disagreement about specific parenting behaviors, or perhaps both? The same problem also plagues the CRD scale (Jouriles et al., 1991), which includes questions about parents' differences in expectations (e.g., "expecting our child to follow rules which are too much for his/her age"; "pushing our child to learn too much at an early age"), behaviors (e.g., "babying our child"; "letting our child make a mess all over the house"), involvement in child-rearing (e.g., "not taking an equal hand in disciplining our child"; "having to be asked to do a little more with our child when I am dead on my feet or not feeling well"), and even interparental animosity (e.g., "implying that some of our child's misbehavior is partly my fault"; "not trusting my judgment in certain aspects of child-rearing"). Other measures like the CCR of the Marital Satisfaction Inventory (Snyder, 1981) and the PPC (Dadds & Powell, 1991) assess yet another set of factors, including on the CCR the importance of childrearing disagreement as a source of couple conflict (e.g., "my spouse and I rarely argue about children"), and on the PPC, the degree of couple communication about child and even non-child issues (e.g., "lack of discussion between parents about child care"; "lack of communication about anything"). Taken together, it is clear that there has not been a consensus in the literature on how the construct of childrearing disagreement should be operationalized. As a result, the construct is ambiguous both in terms of which aspects of parenting practices have been measured (e.g., beliefs, expectations, involvement, behaviors) and the extent to which dimensions more closely related to general marital discord (e.g., quality of communication, degree of hostility or animosity) have been included.

Interestingly, none of the studies reviewed above have attempted to distinguish among these different aspects of childrearing disagreement. Without knowing the content of parents'

disagreements, however, it is not possible for researchers to move beyond the current status of knowledge and begin to investigate the specific mechanisms underlying the link between childrearing disagreement and child behavior problems. For example, at a basic level, there appear to be at least two categories of disagreements that are covered in the various measures: parental disagreement about parenting cognitions (or, what parents think about parent-child interactions; e.g., parenting goals and beliefs), and parental disagreement about parenting behaviors (or, what parents do during parent-child interactions). Questions remain regarding whether research effort should be focused on exploring disagreement in parenting cognitions or parenting behaviors. Do disagreements in both domains relate to child behavior problems in similar manners, or is the association driven by only a particular aspect of disagreement? Some parents, for example, may disagree about whether to praise or to give material rewards in the face of positive child behavior (i.e., disagreement in parenting behaviors), but at the same time agree that behavioral strategies are effective socialization techniques (i.e., agreement in parenting cognitions). Other parents may agree to use time-out whenever the child misbehaves (i.e., agreement in parenting behavior), but at the same time, disagree about how much freedom children should be given in general (i.e., disagreement in parenting cognitions). Would childrearing disagreement in both cases be associated with child problems in the same way? Such specificity will be necessary for information regarding childrearing disagreement to become maximally useful in applied settings. Clinicians who wish to address childrearing disagreement as a risk factor associated with child behavior problems would certainly benefit from knowing which aspects of the disagreement to target in intervention. This study took the first step in this direction by delineating childrearing disagreement in one aspect of parenting

cognitions, parenting goals, from childrearing disagreement regarding specific parenting behaviors employed in response to child misbehavior.

Parenting Goals

Parenting goals refer to the outcomes that parents try to achieve when interacting with their children. In the literature, parenting goals have been categorized according to two distinct dimensions: the urgency of outcome (long- vs. short-term), and the center of focus on which the goal is directed (parent-centered, child-center, or relationship-centered; Dix, 1992; Grusec & Goodnow, 1994; Kuczynski, 1984). Long-term goals reflect objectives that parents would like to achieve over a longer time span (e.g., helping the child develop into an autonomous adult); short-term goals reflect objectives that parents would like to achieve immediately (e.g., having the child clean up the toys right away). Parent-centered goals focus on the needs and desires of the parent (e.g., asking the child to stop crying so that the parent can have peace and quiet); child-centered goals focus on the needs and desires of the child (e.g., asking the child to stop crying so that the child can learn to regulate negative emotions); relationship-centered goals focus on fostering harmonious relationship between family members (e.g., comforting the child so that he knows he is loved).

The importance of parenting goals comes from studies that have demonstrated that these goals are related to, or perhaps even direct, parents' behavioral responses to their children. For example, mothers who were instructed to achieve long-term child compliance on a lab task engaged in more reasoning with their children than mothers who were instructed to achieve only temporary compliance (Kuczynski, 1984). In a series of three studies, Hastings and Grusec (1998) showed that parents who endorsed more parent-centered goals tended to also endorse greater use of power-assertive parenting behaviors and less use of reasoning or responsive parenting

behaviors. In contrast, parents who endorsed more child- and relationship-centered goals were more likely to endorse the use of reasoning and responsive parenting behaviors. Moreover, these researchers found that when parents were provided with hypothetical scenarios of child misbehaviors and asked to achieve specific goals, their reported behavioral responses varied according to the category of goals assigned. Specifically, parents reported using more dominating and directive behaviors to achieve parent-centered goals, more reasoning and directing to achieve child-centered goals, and more responsive behaviors to achieve relationship-centered goals. These are important findings because parental power assertion is associated with more negative affect in children, whereas reasoning and responsive parenting reduce children's resistance and promote children's internalization of values (Grusec & Goodnow, 1994).

Childrearing Disagreement in Parenting Goals vs. Parenting Behaviors

Thus far, no published study has examined the relationships between parental disagreement in parenting goals and parenting behaviors, and child problems. Given that a parent's parenting goals likely reflect his/her individual interpretation of his/her role as a parent, and are probably influenced by a host of factors such as experiences in the family of origin and cultural background, it is not hard to imagine that most couples must invariably, at times, experience differences in what they want to accomplish through their parent-child interactions, or differences in how to prioritize the multiple parenting goals they may each hold. Given the link between parenting goals and parenting behavior as reviewed above, these inter-parent disagreements in parenting goals may lead parents to disagree on how they would each respond behaviorally to specific incidents of child behavior (e.g., whether to remove privilege from the child or to reason with the child when presented with the same child misbehavior). Parental disagreements regarding parenting goals also may lead to parenting inconsistencies *within* a

parent if the parent fluctuates between different goals when confronted with the same child behavior at different times, in order to appease the partner and avoid conflict (e.g., prioritize one goal when the partner is present and a different goal when the partner is absent). Inconsistencies in parenting strategies in turn have been repeatedly shown to be related to behavior problems in children (Acker & O'Leary, 1996; Harvey, Danforth, Ulaszek, & Eberhardt, 2001; Patterson, 1982). This relationship has been interpreted primarily within the framework of behavioral contingencies, and as reflecting the reinforcing effect that parental permissiveness or inconsistent discipline can have on children's negative behaviors. For example, in an experimental study, children whose inappropriate attention-seeking behaviors were met with both reprimands and parental attention were observed to display more frequent attention-seeking behaviors and negative affect (i.e., crying, throwing tantrums, or physical aggression) than those receiving only reprimands (Acher & O'Leary, 1996). In sum, beyond differences in parenting behaviors, differences in parenting goals also appear as an important aspect of inter-parental childrearing disagreement which may have particularly important implications for parenting behavior and child problems.

Thus, in the pursuit of greater specificity in the construct of childrearing disagreement, this study distinguished parental disagreement about parenting goals from parental disagreement about specific parental responses, and examined whether each is related independently to child behavior problems. This study adopted the methodology employed by Hastings and Grusec (1998) and used hypothetical vignettes depicting child misbehaviors to elicit mothers' and fathers' responses regarding their parenting goals and behaviors. Each couple's responses were correlated to generate two separate indices of agreement (i.e., one for disagreement in parenting goals and one for disagreement in parenting behaviors).

The Present Study

To summarize, the purpose of this study was to extend the current literature on childrearing disagreement by further clarifying the well established relationship between childrearing disagreement and negative child behavior. The study addressed this issue in two ways. First, this study examined whether the link between childrearing disagreement and negative child behavior would remain significant after controlling for ineffective parenting behavior. Second, the study dissected the construct of childrearing disagreement into two constituent components – parental disagreement about parenting goals and parental disagreement about parenting behaviors – and examined whether both components are linked to child internalizing and externalizing problems. Given previous mixed findings regarding the moderating effect of child gender on the relationship between childrearing disagreement and child behavior, these questions were examined with child gender as a potential moderator. Finally, this study focused on parents of children in the preschool age range because previous studies have found fathers to become more involved in child care during this period relative to infancy (Belsky, Rovine, & Fish, 1989). Also, parents of toddlers and preschoolers may be particularly likely to experience childrearing disagreements, as several researchers have noted that children’s behaviors during these periods are particularly challenging to manage (Campbell, 2002; Kopp, 1992).

Method

Participants

Parents were recruited from notices posted in community centers, neighborhood family places, coffee shops, newspaper, and on local websites featuring child-related information for families living in the province of British Columbia. The recruitment notices invited parents to

participate in a study about how mothers and fathers parent their children as a couple. To be included in the study, mothers and fathers needed 1) to have spoken English for at least 3 years and be able to read English at the grade seven level, 2) to have a first-born child between 2 and 5 years of age, 3) to be married or cohabiting, and co-parenting the child for at least 2 years, 4) to both agree to participate in the study, and 5) to have access to the Internet. Families with a step-parent who met the above criteria were included. Same-sex couples were not screened out at the time of recruitment, but given that I did not have a large enough sample to check for possible differences between mixed and same-sex couples, data from the three same-sex couples who participated were omitted from this sample. To reduce sample heterogeneity in both the number of years of parenting and co-parenting, only parents whose first-born child was within the target age range were included in the study.

One hundred and seventy-nine couples were screened for inclusion in the study. Of those couples, eight were excluded because the fathers were not interested in participating; five who met the inclusionary criteria later withdrew due to lack of time to participate; and six were excluded from the dataset because only one member of the couple completed the survey. The final dataset therefore contained one hundred and sixty couples (84 couples with a first-born son and 76 couples with a first-born daughter). The mothers' ages ranged from 22 to 48 years. The fathers' ages ranged from 21 to 50 years. The children's ages ranged from 22 to 72 months. Although the presence of physical, mental, or behavioral conditions in the child was not an exclusionary criterion, according to parent report, none of the children in this sample had been diagnosed with any of these conditions. Further demographic information is summarized in Table 1. Mother report of family income and father report of family income were highly correlated, $r(159) = .93, p < .001$, so mother report of family income was randomly chosen to be

used in the analyses. The average reported family income in this sample spans the range of \$50,000 to \$74,999, which corresponds roughly to the median family income of couples residing in the province of British Columbia (\$68,900 per year; Statistics Canada, 2006).

Tests were conducted to compare the demographic characteristics of families of boys and girls in the sample (see Table 1). The boys and girls did not differ significantly in their age, the mothers' age, or the fathers' age. The groups also did not differ significantly in the parents' marital status, mothers' level of educational attainment, fathers' level of educational attainment, yearly family income, mothers' employment status, fathers' employment status, presence of younger sibling(s), mothers' relationship to child, fathers' relationship to child, or the method of recruitment. The only variables with significant differences between families of boys and girls were the children's, mothers' and fathers' ethnicity, with a greater number of children, $\chi^2 (1) = 6.43, p = .01$; mothers, $\chi^2 (1) = 6.42, p = .01$; and fathers, $\chi^2 (1) = 5.82, p = .02$, having an Asian cultural background in families with boys than families with girls. In addition to asking parents to report on their ethnicity, parents also were asked to rate, on a scale ranging from 0 ("not at all Canadian") to 10 ("completely Canadian"), how much they identify themselves as being Canadian. Despite the significant group difference in reported ethnicity, fathers of boys and girls did not differ significantly in the degree to which they identified themselves as Canadian $t (158) = -.02, p = .99$. On the other hand, consistent with the group difference in reported ethnicity, mothers of boys identified themselves as Canadian to a significantly lesser degree than mothers of girls $t (157.47) = -2.06, p = .04$.

Measures

First Research Question: The Role of Parenting Effectiveness

Childrearing Disagreement Scale (CRD; Jouriles et al., 1991). The CRD was used to measure inter-parent childrearing disagreements to answer the first research question of whether childrearing disagreement is related to child behaviors after controlling for poor parenting effectiveness. As described above, the CRD is a scale that measures the frequency of disagreements between parents regarding 21 childrearing topics in the last 6 months. Each parent separately responded to the measure by using a scale ranging from 1 (“never”) to 6 (“daily”) (see Appendix A). The scores of the items were summed for a total score with a possible range of 0 and 126, with higher scores reflecting greater disagreements. The scale has demonstrated excellent internal consistency (.92 for mothers and .86 for fathers; Lee, Beauregard, & Bax, 2005), and in support of its validity, the scale has been shown to be positively associated with both general marital conflict and children’s exposure to conflict (Jouriles et al., 1991). In this sample, the internal consistency (Cronbach’s alpha) of the CRD was .89 for mothers and .88 for fathers.

Parent Practices Scale (PPS; Strayhorn & Weidman, 1988). Each parent completed the PPS separately to measure the construct of parenting effectiveness. The PPS is a 34-item scale that measures the frequency with which parents engage in a set of parenting practices that are considered favorable for child development, and that are commonly promoted in parent training (see Appendix B). The scale is developed specifically for use with children in the preschool age range, and includes items like “how often do you tell your child to do something, with an irritated or angry tone of voice” (reverse scored), and “how often do you and your child laugh

together”. Each item is answered using either a 6-point or a 7-point Likert-scale with answer choices specifically constructed for the question. The scores of the items were summed for a total score with a possible range of 3 to 193, with higher scores reflecting more positive parenting practices. In a sample of low-income families enrolled in a Head Start program, the scale demonstrated acceptable internal consistency ($\alpha = .79$) and a 6-month test-retest reliability of $.70$ (Strayhorn & Weidman, 1988). Scores on the scale have been shown to be significantly correlated with observer-ratings of friendly and cooperative parent-child interactions (Strayhorn & Weidman, 1988). The scale also is negatively correlated with mothers’ endorsement of unreasonable commands, and children’s symptoms of hostility, anxiety, and depression (Strayhorn & Weidman, 1988). In this sample, the internal consistency (Cronbach’s α) of the PPS was $.81$ for mothers and $.74$ for fathers.

Dyadic Adjustment Scale (DAS; Spanier, 1976). Each parent completed the DAS, which is a 32-item scale that measures the quality of the respondent’s adjustment to a dyadic relationship (see Appendix C). It contains four subscales which measure dyadic satisfaction (e.g., “How often do you and your partner quarrel? (reverse scored)”, “Do you confide in your mate?”), dyadic cohesion (e.g., “How often do you have a stimulating exchange of ideas”, “How often do you laugh together?”), dyadic consensus (extent to which partners agree about topics such as household tasks and career decisions), and affectional expression (quality of sexual relationship and whether partners have problems with not showing love). Parents’ ratings on the 32 items were summed to yield a total score with a possible range of 0 to 151, with higher scores reflecting better marital adjustment. The scale has demonstrated excellent reliability, with a $.96$ internal consistency for the total scale (Spanier, 1976). When the DAS was administered to a married sample and a divorced sample, the married group had significantly higher total scores

than the divorced group (Spanier, 1976). The DAS also was found to be highly correlated with another widely used measure of marital adjustment – the Locke-Wallace Marital Adjustment Test (Spanier, 1976). The total score was used as the measure of marital adjustment in this study. In this sample, the internal consistency (Cronbach’s alpha) of the DAS was .89 for mothers and .86 for fathers.

Child Behavior Checklist (CBCL/1.5-5; Achenbach & Rescorla, 2000). The Internalizing and the Externalizing Scales of the CBCL were used as measures of child behavior problems in this study (not appended due to copyright restriction). The CBCL/1.5-5 contains 99 items depicting specific behavioral and emotional problems seen in children between 1.5 and 5 years of age. Each parent completed the measure separately by using a scale from 0 (“not true”) to 2 (“very or often true”) to indicate how much each problem is observed in their child. The raw scores of the items were summed for a total score with a possible range of 0 to 72 on the Internalizing scale and 0 to 48 on the Externalizing scale, with higher scores on both scales reflecting greater child problems. These total raw scores were used in the analyses. The CBCL has demonstrated good reliability, with .90 and .87 8-day test-retest reliability for the Internalizing and the Externalizing scales respectively (Achenbach & Rescorla, 2000). With respect to validity, the Internalizing and the Externalizing scales have been shown, with odds ratios of 6 and 5 respectively, to discriminate between nonproblem children and children referred for clinical intervention for behavioral or emotional problems. The Externalizing and the Internalizing scales also have been shown to correlate significantly with the externalizing and internalizing scales of the Infant Toddler Social and Emotional Assessment (Achenbach & Rescorla, 2000). Finally, the scale developers reported that mothers’ and fathers’ ratings correlated at .59 on the Internalizing scale and .67 on the Externalizing scale; mothers’ and

fathers' mean scores on the scales did not differ significantly (Achenbach & Rescorla, 2000). In this sample, the internal consistency (Cronbach's alpha) was .91 for mothers and .89 for fathers on the CBCL Externalizing subscale, and .85 for mothers and .83 for fathers on the CBCL Internalizing subscale.

Paulhus Deception Scales (PDS; Paulhus, 2002). The PDS is a 40-item measure to assess the respondent's tendency to complete self-report measures in a socially desirable manner. In this study, the 20-item Impression Management scale was completed by each parent to measure their tendency to positively inflate self-descriptions in order to impress others (not appended due to copyright restriction). This scale was included because many constructs measured in this study (e.g., marital adjustment, childrearing disagreement, parenting practices) were judged to have the potential to elicit socially desirable responses from parents. Parents were asked to indicate, using a scale from 1 ("not true") to 7 ("very true") how much they agreed with each of the 20 statements (e.g., "I never cover up my mistakes", "I sometimes drive faster than the speed limit"). One point is added to the respondent's score for each item answered in a socially desirable manner (i.e., ratings of 6 or 7), resulting in a total score ranging from 0 to 20. The PDS has been shown to correlate positively with other measures of socially desirable responding and with various lie scales (Paulhus, 1991; 2002). The internal consistency of the Impression Management scale in this sample (Cronbach's alpha) was .72 for mothers and .75 for fathers.

Second Research Question: Content of Childrearing Disagreement

Inter-parent disagreement in parenting behaviors. The degree of disagreement between mothers' and fathers' specific parenting responses to child misbehavior was measured using the procedure developed by Hastings and Grusec (1998). Their original questionnaire consisted of

five brief vignettes depicting a 6-year-old child behaving in a disobedient manner (e.g., behaving badly in a grocery store, refusing to clean up toys before a guest arrives). The respondents were instructed to imagine that the child was their own, and to write down what they would do or say to the child to handle the situation. Mothers' freely-reported behavioral responses were coded and then factor-analyzed by Hastings and Grusec (1998) into 11 categories. The 11 categories include punitive control (disapprove, verbally or physically show force), negative control (induce guilt, humiliate, or withdraw love), threaten/punish (withdraw privilege, isolate socially, or threaten to do so), firm control (command, prohibit, or state rule), surrender (give up or avoid the situation), reason (provide rationale or point out natural consequences of the child's behavior), empathic reason (point out the consequence of the child's behavior for another person or make the child aware of others' feelings), model (demonstrate the appropriate behavior to the child), share control (compromise, negotiate or cooperate), show warmth (show love, comfort, or praise), and divert (e.g., divert the child's attention to another activity).

Hastings and Grusec's (1998) original questionnaire was adapted for use in this study in the following ways. First, the vignettes were checked and pilot-tested to ensure that the misbehaviors depicted were commonly observed in toddlers and preschoolers. One vignette (i.e., child using derogatory terms to describe the losing team in a swimming race) was removed because the scenario was judged to reflect the behavior of an older child. Considering the fact that some families may only have one child, I also removed the vignette portraying a child accusing a parent of preferring a younger sibling. Two new vignettes were generated (one depicting a child refusing to stop watching TV and go to bed, and another one depicting a child constantly getting up and walking away from the dinner table during meal time). Second, in order to facilitate comparison of responses between members of the parenting dyads, parents

were asked to rate a list of behavioral responses rather than to report their reactions spontaneously. Third, to increase the variation of scores across participants, mothers and fathers were explicitly encouraged to use the full range of the rating scale as part of the instructions. This instruction was added as a modified version of the questionnaire (Coplan, Hastings, Lagacé Séguin, & Moulton, 2002) was previously used in our lab, and results showed that although each behavioral and goal statement demonstrated good reliability across vignettes, there was little variation among mothers' responses.

The 11 categories of parental behaviors obtained by Hastings and Grusec (1998) served as the basis for the parenting behaviors rated by mothers and fathers. Specifically, each category was considered to represent one type of parenting behavior, and 11 statements describing the 11 parenting behaviors were generated. The statements were worded so that all items were judged to elicit comparable degrees of socially desirable responding from parents. Subsequently, two of the parenting behaviors – negative control and threaten/punish – were further divided into induce guilt vs. remove affection, and remove privilege vs. isolate socially, because the results of our pilot tests suggested that some parents considered these behaviors to be distinct from each other. The resulting 13 parenting behaviors were presented to parents after they read each vignette and parents were asked to indicate how likely they would be to engage in each parenting behavior using a scale from 1 (“would definitely not do”) to 7 (“would definitely do”) (see Appendix D).

Internal consistency estimates were calculated for each parenting behavior across the five vignettes. The Cronbach's alphas for the five-item scales ranged between .64 and .92 for mothers, and between .65 and .89 for fathers. In total, mothers and fathers each made 65 ratings (they rated 13 parenting behaviors for each of the five vignettes) and these ratings were used to calculate an intra-class correlation (ICC) reflecting the degree of inter-parent disagreement on

parenting behaviors (ICC for Behaviors). The approach of using ICC to represent an index of agreement between members of a dyad has several advantages. First, standard statistical techniques can be applied to the agreement scores that are computed as ICCs (Maguire, 1999). The approach is also superior to using Pearson correlations in that it considers the actual degree of match between the dyad's scores (Maguire, 1999). The index of agreement obtained using this method has a possible range of -1 to +1, with -1 indicating a perfect disagreement, 0 indicating a lack of relationship, and +1 indicating a perfect agreement between mothers and fathers. A high ICC score for a couple indicates that both members of the dyad tend to give identical ratings on the same items in a measure.

Inter-parent disagreement in parenting goals. After rating the 13 parenting behaviors for each scenario, parents were presented with six pregenerated parenting goals and were asked to indicate, using a 7-point Likert-scale (1 = "not at all important" and 7 = "very important"), how important each of the goals would be for them in the situation as depicted by the vignette. Parents were asked to rate the parenting behaviors before they rated the parenting goals because previous research found that parents' reported choice of parenting behaviors varied as a function of the type of parenting goals that they were primed to focus on (Hastings & Grusec, 1999). The six goals included two parent-centered goals ("get my child to behave properly right away" and "reduce my own anxiety"), two child-centered goals ("make my child happier" and "help my child get along better in life and enhance my child's well being"), and two relationship-centered goals ("maintain a loving and trusting relationship with my child" and "teach my child how the two of us can problem-solve together"). In the original study, Hastings and Grusec (1998) found that over 95% of the parenting goals that parents freely reported were reliably coded into these six categories, with inter-rater reliability ranging between .71 and 1.00. As evidence of the

validity of the measure, parents high on authoritarianism (i.e., a parenting style that is low in warmth and high in control) have been found to focus less on child- and relationship-centered goals when dealing with children's misbehavior (Coplan, et al., 2002) and to endorse more parent-centered goals 2 years later (Hastings & Rubin, 1999).

In this sample, internal consistency estimates were calculated for each goal across the five vignettes. The Cronbach's alphas for the five-item scales ranged between .82 and .92 for mothers, and between .85 and .93 for fathers. In total, mothers and fathers each made 30 ratings that were then used to calculate the ICC that represented the degree of inter-parent disagreement on parenting goals (ICC for Goals).

The Dyadic Adjustment Scale, the Child Behavior Checklist, and the Paulhus Deception Scale were also used in the analyses to answer the second research question. Table 2 provides a quick reference for the acronyms of the questionnaires used or referred to in this study.

Procedure

Approval for this project was obtained from the University's ethical review committee. When mothers and fathers first contacted the lab, the author or a research assistant described the study in detail and, if the parent expressed interest in participating, a brief phone screening was conducted to determine whether the family met the five criteria to be included in the study. In addition to obtaining verbal consent from the parent who contacted the lab, we also established contact with the other parent directly to confirm his/her consent to participate in the study, and to address any questions or concerns. The eligible couples were then provided with two separate sets of participant numbers and passwords (i.e., one for the mother, and one for the father) to gain access to the Web site containing the study materials. To ensure that each parent provided

their ratings independently, parents were told, as part of the initial phone screen, to complete their own set of measures without consulting or discussing with their partner, and they were explicitly asked whether they agreed to follow this rule. All parents agreed to this request.

All identifying information was gathered over the phone, and data collected online were linked to the identity of the participants only through their participant numbers. Documents that contained participants' identifying information and participant numbers were kept in a locked cabinet in the lab. To control for potential order effects, parents were randomly assigned to complete the questionnaires in one of four orders. All parents began their survey with the General Family Information, and ended with the CBCL and the PDS IM. The remaining four questionnaires were counterbalanced in the following ways: 1) PBGQ, PPS, DAS, and CRD; 2) PPS, PBGQ, CRD, DAS; 3) DAS, CRD, PBGQ, PPS; and 4) CRD, DAS, PPS, PBGQ. Comparisons of means on all measures, using one-way ANOVAs, revealed no significant group differences among parents who completed the questionnaires in different orders (all $ps > .05$).

Internet Survey

For several reasons, collecting data over the Internet is a research method that is particularly well suited for the design of this study. First, studies that have examined the strategies for involving fathers in research have found the success rates to be enhanced by the use of "family-friendly" research methodology, such as telephone interviewing (Kirsch & Brandt, 2002; Phares, Lopez, Fields, Kamboukos, & Duhig, 2005). The Web-based approach shares the advantage of a telephone interview in the reduced demand that the study places on research participants, and in addition, offers the flexibility of completing the measures whenever is most convenient for the fathers. Second, relative to paper surveys, it is harder and more inconvenient for mothers and fathers to complete the Internet surveys simultaneously and compare their

responses. More generally, studies that have compared the effects of survey methods on participants' tendency to respond in a socially desirable manner have found computer-administered surveys to be equal or superior to paper surveys in this respect (Kiesler & Sproull, 1986; Knapp & Kirk, 2003). In addition, research has shown that in comparison to participants who received paper surveys, those who were assigned electronic surveys had a faster response time, completed more items, and made fewer mistakes in their responses (Cobanoglu, Warde, & Moreo, 2001; Kiesler & Sproull, 1986). Several recent studies have also found web-based surveys to yield data that were psychometrically comparable to those obtained on paper-and-pencil questionnaires (Meyerson & Tryon, 2003; Pettit, 2002). Finally, based on the results of the Canadian Internet Use Survey (CIUS) conducted by Statistics Canada, 63.3% of adults in British Columbia reported using the Internet at home, and 69.3% of adults in British Columbia reported using the Internet from any location (e.g., home, school, work, public library) in 2005 (Statistics Canada, 2006). In 2001, up to 80% of families with children under the age of 18 reported using the Internet from any location (Statistics Canada, 2002). Thus, an Internet survey appeared to be a feasible method for gathering data from families within the province of British Columbia, and has the potential advantage of recruiting families from a broader geographical region than otherwise possible.

When parents first logged onto the Web site, they were provided with relevant information as required by the University's ethical review committee in order to obtain consent. Parents also were given the instructions for completing the survey, and were reminded it was important that they complete the questionnaires independently without discussion with their partner. This front page also contained a statement informing parents that their consent to participate would be assumed if all questionnaires were completed and submitted.

The presentation of the questionnaires was simple and professional. Visual graphics were minimized to ensure that the Web pages could be loaded smoothly regardless of the participants' type of computer system and internet connection (Braithwaite, Emery, de Lusignan, & Sutton 2003). A visual marker which tracked parents' progress in completing the survey was displayed on each page.

Parents were instructed to complete and submit their surveys within 1 week of obtaining their participant numbers. A reminder call was made to parents if the surveys were not submitted within 1 week. Finally, each parent who completed the measures received a \$15 cheque by mail as a token of appreciation for their time and participation.

Results

Data Inspection

The means, standard deviations, and ranges of the primary variables are presented in Table 3. As reported above, all questionnaires achieved satisfactory internal consistency (i.e., Cronbach's $\alpha > .70$), with the exception of two parenting behavior categories on the PBGQ that had alpha values of .64 ("distract my child's attention to another activity"), and .65 ("tell my child the rule that he/she is supposed to follow") across the five vignettes. Given that the agreement between parental ratings (i.e., ICC for Behaviors), rather than individual parent's scores, was used as the unit of analysis, these two parenting behavior categories were not removed.

All data were first examined for completeness and normality. Across all measures, the amount of missing items ranged between 0.24% and 1.13%. Analysis of the pattern of missing data using Little's MCAR (Missing Completely At Random) test (Little, 1988) supports the assumption that the data are missing completely at random and not associated with participant

characteristics, $\chi^2(689) = 667.94, p = .71$. No parent missed more than 20% of the items on any single measure⁴ and the missing values were replaced by mean substitution. Visual inspection of the data revealed that all variables were continuously distributed, with all responses falling within 3.5 standard deviations above or below the means. Mothers' ratings on the CBCL Internalizing subscale, fathers' ratings on the CBCL Internalizing subscale, and mothers' ratings on the CRD were slightly skewed in the positive direction (with the skewness indices ranging between 1.06 and 1.41) and square root transformations were applied to correct for the skew. The transformations were successful in bringing the distributions closer to normality and the transformed scores were used in all analyses.

Description of Scores

The mean of the ICC for parenting behaviors (.57; 95% confidence intervals for the individual couple's ICCs ranged from -.16 – .33 to .83 – .93, with an average of .39 – .71) suggested that, as a group, this sample of parents tended to agree moderately with their partners with respect to parenting behaviors. Although the mean of the ICC for parenting goals (.38; 95% confidence intervals for the individual couple's ICCs ranged from -.54 – .13 to .72 – .93, with an average of .05 – .62) was slightly smaller in magnitude than that for parenting behaviors, it was still in the positive direction, indicating again, on average, a moderate degree of agreement between members of the dyads with respect to their parenting goals. Mothers' and fathers' mean scores on the CRD measure of childrearing disagreement corresponded roughly to the mean reported in the original study (i.e., 38.5) based on a community sample of mothers from intact marriages with 3-year-old sons (Jouriles et al., 1991). With regard to parenting effectiveness,

⁴ A total of 11 parents missed more than 10% of items on a single measure. Analyses with these parents deleted from the dataset revealed no change in the pattern of results.

comparisons of the mean scores in this sample with the percentile ranks reported in the original measure revealed that the mean scores on the PPS of mothers with boys placed them approximately between the 50th and 55th percentile, and the mean scores on the PPS of mothers with girls placed them approximately between the 65th and 70th percentile. Similarly, the mean scores on the PPS of fathers with boys placed them approximately between the 45th and 50th percentile, and the mean scores on the PPS of fathers with girls placed them approximately between the 50th and 55th percentile. These scores suggested that this was a sample of parents with average or above average parenting skills relative to the normative sample of parents. It is also worth noting that, although the current sample of parents was recruited from the community, the range of scores on the PPS obtained from both the mothers (106.39 – 175.48 with boys and girls combined) and fathers (104.13 – 175.48 with boys and girls combined) were comparable to, although slightly higher than, the two reference samples reported in the original measure. Specifically, Strayhorn and Weidman (1988) reported that the scores ranged from 99.46 to 172.35 for a group of mothers whose children were enrolled in the Headstart program, and from 96.39 to 166.99 for a sample of mothers whose children had at least one identifiable behavior problem.

With respect to marital adjustment, parents' mean scores on the DAS were only slightly lower than the mean of the married sample (mean = 114.8), but considerably higher than the mean of the divorced sample (mean = 70.7), as reported by Spanier (1976). In terms of child behaviors, the boys' mean T-scores were 50 and 51 on the CBCL Externalizing Scale, and 53 and 55 on the CBCL Internalizing Scale. The girls' mean T-scores were 46 and 47 on the CBCL Externalizing Scale, and 49 and 51 on the CBCL Internalizing Scale. Together, based on mothers' ratings, 6.9% of the children scored within the borderline clinical range (i.e., 84th – 90th

percentile) and 6.9% of the children scored within the clinical range (i.e., above the 92nd percentile) for their externalizing scores; 8.8% of the children scored within the borderline range and 10% of the children scored within the clinical range for their internalizing scores. Based on fathers' ratings, 8.1% of the children scored within the borderline range and 3.1% scored within the clinical range for their externalizing scores; 6.9% of the children scored within the borderline range and 10.6% of the children scored within the clinical range for their internalizing scores. Thus, although the majority of the children in this sample were rated by their parents as exhibiting behaviors within the normal range, approximately 12% and 18% of the sample were described as showing considerable (i.e., above the 84th percentile when compared with other children of similar ages) levels of externalizing and internalizing behaviors respectively. Finally, both mothers and fathers of boys and girls scored within the average range on the measure of impression management, the PDS IM (T-scores falling between 55 and 60), suggesting that the parents most likely did not purposely self-enhance while completing the questionnaires.

Comparison of Mothers vs. Fathers

Group differences between mothers' and fathers' reports on the measures of childrearing disagreement, parenting practices, marital adjustment, and child problems were explored using paired t-tests. Significant differences were found for parents' ratings on the CRD (with mothers reporting greater childrearing disagreements than fathers, $t(159) = 3.15, p < .01$) and the PPS (with mothers reporting more positive parenting practices than fathers, $t(159) = 4.50, p < .01$). All other comparisons were non-significant ($ps > .20$).

Comparison of Boys vs. Girls

Child gender differences were tested for the main variables using independent t-tests and these results are presented in Table 3. Parents of boys and girls did not differ significantly in the mean ICC for parenting behaviors, the mean ICC for parenting goals, or the degree of childrearing disagreement on the CRD as reported by fathers. Mothers of boys, however, reported significantly higher levels of childrearing disagreement as measured by the CRD than mothers of girls. Both mothers and fathers of girls scored higher on the measure of positive parenting practices (PPS) than those of boys; in contrast, parents of boys and girls did not differ significantly in the mean level of marital adjustment (DAS) as reported by either mothers or fathers. With respect to child problems, although the two groups did not differ significantly in their level of externalizing problems as reported by fathers, mothers of boys rated their children as exhibiting higher levels of externalizing problems than mothers of girls. Boys and girls did not differ significantly in their level of internalizing problems as reported by either mothers or fathers. Finally, there were no group differences in mothers' and fathers' scores on the impression management measure. Overall therefore, the families of boys and girls in this sample appeared to be largely comparable. The relatively higher externalizing scores for boys, at least as reported by mothers, is consistent with findings reported in the literature on gender differences in child behavior problems (Keenan & Shaw, 1997). In addition, it makes sense that the greater externalizing behaviors in boys co-existed with less positive parenting behaviors (as reported by both parents) and more childrearing disagreements (as reported by mothers). The direction of causation in these relationships of course can not be determined from data in the current study. Given the lower level of Canadian identity reported by mothers of boys than mothers of girls as described above, the possibility was also entertained that the higher level of child externalizing

problems and childrearing disagreement reported by mothers of boys in fact reflected a cultural difference. An analysis of covariance was conducted for each of the two dependent variables (i.e., mothers' report of child externalizing problems and mothers' report of childrearing disagreement), with child gender tested as the independent variable, and mothers' self-reported levels of Canadian identity covaried. In both cases, the effects of child gender remained significant [$F(1,157) = 8.74, p < .01$ for child externalizing problems, and $F(1,157) = 4.04, p < .05$ for childrearing disagreement], suggesting that the gender differences in mothers' report of child externalizing problems and mothers' report of childrearing disagreement could not be accounted for by cultural variations between the two groups.

Given these significant differences between boys and girls, in subsequent regression analyses, child gender and its interaction with the predictors was entered. However, as will be reported later in the results, child gender never significantly moderated the relationships between parent predictors and child outcomes. Specifically, in the regression models conducted to examine the first research question, child gender was included as a main effect, and the interaction between child gender and the CRD Scale was tested. In the regression models conducted to examine the second research question, child gender was included as a main effect, and the interactions between child gender and the ICC for Behaviors, and between child gender and the ICC for Goals were tested. None of the interaction terms were significant in any of the regression models. All regressions are thus presented with the main effect of child gender retained but the interaction term omitted from the models. In addition, all bivariate correlations are presented with the boys and girls combined.

Bivariate Correlations between Parental Disagreement, Marital Adjustment, and Parenting

Mothers' and fathers' reports on the following variables were examined to determine whether composite scores should be formed by combining across parents: CBCL Externalizing scale [$r(160) = .53, p < .001$], CBCL Internalizing scale [$r(160) = .46, p < .001$], DAS [$r(160) = .38, p < .01$], and CRD [$r(160) = .45, p < .01$]. Although all of these correlations were significant at the $p < .01$ level, none were sufficiently high (i.e., sharing at least 50% of the variance) to justify forming a composite score based on both parents' ratings. Therefore, parallel analyses were conducted for mothers' and fathers' reports on these measures separately.

The bivariate correlations between parents' disagreement in parenting behaviors and goals, childrearing disagreement, marital adjustment, and parenting practices are presented in Table 4. Overall, all of the correlations were in the expected directions. First, in support of the validity of the ICCs as a measure of parental disagreement, both the ICC for Behaviors and the ICC for Goals were significantly correlated with the CRD [with effect sizes in the small to medium range according to Cohen (1988)]. With respect to the relationship between childrearing disagreement and other constructs, as expected, parents who reported fewer childrearing disagreements also reported being better adjusted in their marital relationship (i.e., negative correlations between the CRD and the DAS with medium to large effect sizes). In addition, consistent with previous literature (Deal et al., 1989; O'Leary & Vidair, 2005), parents who reported less childrearing disagreements also had better parenting skills. This relationship was reflected in the medium-sized positive correlations between the ICC for parenting behaviors and the PPS, and the small to medium-sized positive correlations between the ICC for parenting goals and the PPS. The negative correlations between the CRD and the PPS (with small to medium effect sizes) also supported this relationship. Figures 3 to 7 contain the scatter plots that

depict the relationships between the CRD and the PPS, the CRD and child problems, and the PPS and child problems. Visual inspection of the scatter plots suggests that the variables are related in a linear fashion and across the entire range of the scores obtained in this sample.

First Research Question: The Role of Parenting Effectiveness

The first research question asks whether childrearing disagreement is associated with child behavior problems after controlling for parenting effectiveness. To answer this question, I first computed bivariate correlations between the parent and the child variables, and then used regression models to test for the unique contribution of childrearing disagreement to child behaviors. The bivariate correlations between childrearing disagreement (CRD), marital adjustment (DAS), parenting practices (PPS), and child behaviors (CBCL) are presented in Table 5. As can be seen from the table, both the CRD and the PPS were consistently correlated with the CBCL Externalizing Scale (medium effect sizes for the CRD and large effect sizes for the PPS). This pattern was largely the same for the CBCL Internalizing Scale, although the correlation between fathers' report on the CRD and mothers' report on the CBCL Internalizing scale fell below significance ($p = .06$) (small to medium effect sizes for both the CRD and the PPS). In contrast, somewhat contrary to the literature, the DAS was only minimally correlated with child behavior problems in this sample, with the only significant correlation being between mothers' reports on the DAS and the CBCL Externalizing Scale.

Prior to conducting the hierarchical regressions, child age, family income, and parents' scores on the measure of impression management (PDS IM) were correlated with the measures of parenting practices (PPS), childrearing disagreement (CRD), and child behaviors (CBCL) to identify potential control variables. Family income emerged as being significantly correlated

with fathers' reports of child externalizing and internalizing problems [$r(159) = -.22, p < .01$ and $r(159) = -.20, p < .05$ respectively]. In addition, mothers' report on the PPS was significantly associated with mothers' report on the PDS IM, $r(160) = .30, p < .001$, and fathers' report on the CRD was significantly associated with fathers' report on the PDS IM, $r(160) = -.27, p < .001$. All other correlations with possible control variables were not significant. Family income and parents' PDS IM scores were therefore entered into all regression models as control variables. Although the DAS was not consistently correlated with child problems in this sample, given the early findings that poor marital adjustment is associated with child problems (Reid & Crisafulli, 1990; Davies & Cummings, 1994), parents' DAS scores also were included as control variables in the regression models.

Hierarchical regressions were performed separately for mothers and fathers, and separately for child externalizing and internalizing problems as the dependent variables, for a total of four regression models. Child gender was recoded to 0 (for boy) and 1 (for girl), and the CRD was centered to reduce multicollinearity with the interaction term. At Step 1 of the regressions, marital adjustment, family income, the impression management score, and child gender were entered. At Step 2, PPS was entered to control for parenting effectiveness. At Step 3, CRD was entered to examine the main effect of childrearing disagreement. At Step 4, the interaction term between child gender and the CRD was entered to examine whether child gender moderated the relation between childrearing disagreement and child behavior problems. At each step, the model was tested for significance, and at Steps 2, 3, and 4, the incremental change in R^2 was examined. As reported above, the R^2 changes associated with the interaction terms, reflecting moderation by child gender, never achieved significance in any of the regression models. All regressions were thus reported with only the first three steps in the models. Results

of the regression models (full models at Step 3) are presented in Table 6 for externalizing problems and in Table 7 for internalizing problems.

Child Externalizing Problems

For mothers, the full model predicting child externalizing problems (CBCL Externalizing) was significant, $R^2 = .31$, $F(6, 152) = 11.37$, $p < .001$. At Step 1, the variance accounted for in CBCL Externalizing scores by child gender, family income, mothers' DAS scores, and mothers' PDS IM scores was significant. At Step 2, mothers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .18$, $F \text{ Change}(1, 153) = 38.39$, $p < .001$. At Step 3, mothers' report on the CRD accounted for even further significant incremental variance, $R^2 \text{ Change} = .03$, $F \text{ Change}(1, 152) = 6.54$, $p < .05$. Examination of the beta weights indicated that mothers' reports of both PPS and CRD scores accounted for significant unique variance in mothers' report on the CBCL Externalizing scale; the variance accounted for by child gender fell just below significance ($p = .05$). Hence, based on mothers' ratings, childrearing disagreement continued to predict externalizing problems in children after controlling for parenting effectiveness.

For fathers, the full model predicting CBCL Externalizing was significant, $R^2 = .24$, $F(6, 152) = 8.04$, $p < .001$. At Step 1, child gender, family income, fathers' DAS scores, and fathers' PDS IM scores accounted for significant variance in fathers' report on the CBCL Externalizing scale. At Step 2, fathers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .11$, $F \text{ Change}(1, 153) = 19.81$, $p < .001$. At Step 3, fathers' report on the CRD accounted for even further significant incremental variance, $R^2 \text{ Change} = .06$, $F \text{ Change}(1, 152) = 12.13$, $p < .01$. Examination of the beta weights indicated that fathers' reports of both PPS and CRD scores accounted for significant unique variance in fathers' report on the CBCL

Externalizing scale. Hence, duplicating the results obtained with mothers, based on fathers' ratings, childrearing disagreement continued to be related to externalizing problems in children after controlling for parenting effectiveness.

Child Internalizing Problems

For mothers, the full model predicting child internalizing problems (CBCL Internalizing) was significant, $R^2 = .14$, $F(6, 152) = 4.24$, $p < .01$. At Step 1, the variance accounted for in CBCL Internalizing scores by child gender, family income, mothers' DAS scores, and mothers' PDS IM scores failed to reach significance. At Step 2, mothers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .09$, $F \text{ Change}(1, 153) = 16.45$, $p < .001$. At Step 3, mothers' report on the CRD failed to account for significant incremental variance, $R^2 \text{ Change} = .02$, $F \text{ Change}(1, 152) = 2.65$, $p = .11$. Examination of the beta weights indicated that only mother's PPS scores accounted for significant unique variance in CBCL Internalizing scores. Hence, based on mothers' ratings, childrearing disagreement was not significantly associated with internalizing problems in children after controlling for parenting effectiveness.

For fathers, the full model predicting CBCL Internalizing was significant, $R^2 = .14$, $F(6, 152) = 4.04$, $p < .01$. At Step 1, the variance accounted for in CBCL Internalizing scores by child gender, family income, fathers' DAS scores, and fathers' PDS IM scores was not significant. At Step 2, fathers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .06$, $F \text{ Change}(1, 153) = 10.25$, $p < .01$. At Step 3, fathers' report on the CRD also accounted for significant incremental variance, $R^2 \text{ Change} = .03$, $F \text{ Change}(1, 152) = 5.37$, $p < .05$. Examination of the beta weights indicated that both fathers' scores on the PPS, and fathers' scores on the CRD accounted for significant unique variance in child internalizing

problems. Hence, in contrast to mother's model for child internalizing problems, based on fathers' ratings, childrearing disagreement continued to be associated with internalizing problems in children after controlling for parenting effectiveness.

Given that within each of the four regression models described above, both predictor and outcome variables were reported by the same parent, an additional set of regression analyses were conducted to examine the effect of rater variance⁵. In this second set of regression models, however, mothers' reports of parenting practices and childrearing disagreement were tested as predictors of fathers' reports of child problems, and vice versa. These regression models (full models at Step 3) are presented in Table 8 for externalizing problems and in Table 9 for internalizing problems. Once again, Step 4 of the models is omitted from the tables because none of the R^2 changes associated with the interaction terms reflecting child gender moderations were significant.

Child Externalizing Problems (Cross-Informant Analyses)

For mothers' reports of predictors and fathers' reports of CBCL Externalizing scores, the full model was significant, $R^2 = .21$, $F(6, 152) = 6.67$, $p < .001$. At Step 1, child gender, family income, mothers' DAS scores, and mothers' PDS IM scores accounted for significant variance in fathers' report on the CBCL Externalizing scale. At Step 2, mothers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .08$, $F \text{ Change}(1, 153) = 13.39$, $p < .001$. At Step 3, mothers' report on the CRD also accounted for significant incremental variance, $R^2 \text{ Change} = .06$, $F \text{ Change}(1, 152) = 11.95$, $p < .01$. Examination of the beta weights

⁵ Similar to the regression models described above, analyses were performed separately for mothers and fathers, and separately for child externalizing and internalizing problems as the outcome variables.

indicated that mothers' scores on both the PPS and the CRD accounted for significant unique variance in fathers' report of CBCL Externalizing scores. Hence, even when fathers' report of child problems were used, mothers' report of childrearing disagreement continued to be associated with externalizing problems in children after controlling for parenting effectiveness.

For father's reports as predictors and mothers' reports of CBCL Externalizing as the outcome, the full model was significant, $R^2 = .16$, $F(6, 152) = 4.96$, $p < .001$. At Step 1, child gender, family income, fathers' DAS scores, and fathers' PDS IM scores accounted for significant variance in mothers' reports on the CBCL Externalizing scale. At Step 2, fathers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .04$, $F \text{ Change}(1, 153) = 7.89$, $p < .01$. At Step 3, fathers' report on the CRD also accounted for significant incremental variance, $R^2 \text{ Change} = .03$, $F \text{ Change}(1, 152) = 4.61$, $p < .05$. Examination of the beta weights indicated that fathers' scores on the PPS and the CRD, as well as child gender, all accounted for significant unique variance in mothers' reports of CBCL Externalizing scores. Hence, even when mothers' report of child problems were used, fathers' report of childrearing disagreement continued to be related to externalizing problems in children after controlling for parenting effectiveness.

Child Internalizing Problems (Cross-Informant Analyses)

For mothers' report of predictors and fathers' report of CBCL Internalizing outcomes, the full model was significant, $R^2 = .10$, $F(6, 152) = 2.71$, $p < .05$. At Step 1, the variance accounted for in fathers' report of CBCL Internalizing scores by child gender, family income, mothers' DAS scores, and mothers' PDS IM scores was not significant ($p = .13$). At Step 2, mothers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .03$, $F \text{ Change}(1,$

153) = 5.09, $p < .05$. At Step 3, the incremental variance accounted for by mothers' report on the CRD failed to reach significance, R^2 Change = .02, F Change (1, 152) = 3.49, $p = .06$.

Examination of the beta weights indicated that the unique variance in fathers' report of CBCL Internalizing scores accounted for by mothers' scores on the PPS was not significant ($p = .11$), and the unique variance accounted for by mothers' scores on the CRD also fell short of significance ($p = .06$). Hence, as was the case when both the predictors and child internalizing problems were reported by mothers, childrearing disagreement was not significantly related to cross-informant reports of children's internalizing problems after controlling for parenting effectiveness.

For fathers' reports as predictors and mothers' report of CBCL Internalizing scores as outcomes, the full model was not significant, $R^2 = .06$, F (6, 152) = 1.62, $p = .15$. Hence, although childrearing disagreement was found to be uniquely related to child internalizing problems when both the predictor and outcome variables were reported by the fathers, the regression model failed to reach significant when mothers' report of child problems were used.

Second Research Question: Content of Childrearing Disagreement

To address the second research question concerning which component of childrearing disagreement (i.e., parental disagreement in specific parenting behaviors vs. parental disagreement in parenting goals) was related to child problems, bivariate correlations were computed between each type of inter-parent disagreement (calculated as the ICCs) and child problems. These correlations are presented in Table 10. Children's externalizing problems (CBCL Externalizing) were significantly correlated (with small to medium effect size) with parental disagreement in parenting behaviors (ICC for Behaviors). Children's internalizing

problems (CBCL Internalizing) were also significantly correlated (with a small to medium effect size) with the ICC for Behaviors when child problems were reported by fathers, although the correlation dropped below significance ($p = .06$) when mothers' report of child problems was used. Parental disagreement in parenting goals (ICC for Goals) was correlated with neither CBCL Externalizing nor CBCL Internalizing.

To further explore the predictive ability of parental disagreement in specific parenting behaviors (ICC for Behaviors), the question of whether the ICC for Behaviors would continue to be associated with child problems after controlling for parenting effectiveness was examined next. Again, prior to conducting the hierarchical regressions, child age, family income, and parents' scores on the measure of impression management (PDS IM) were correlated with parental disagreement in parenting behaviors (ICC for Behaviors) to identify potential control variables. None of these correlations were significant (ps ranged between .07 and .50). As reported above, family income was significantly correlated with fathers' reports of child externalizing and internalizing problems, and mothers' PDS IM scores were significantly correlated with mothers' ratings on the PPS. Family income and parents' PDS IM scores were therefore entered into the regressions as control variables. Again, parents' reports on the DAS also were included as control variables given the significant relationship reported in the literature between marital conflict and child maladjustment (Reid & Crisafulli, 1990).

Four regression models were tested with child gender, family income, marital adjustment (DAS), and parents' impression management scores (PDS IM) entered in Step 1. At Step 2, PPS was entered to control for parenting effectiveness. At Step 3, the ICC for Behaviors was entered. The moderating effect of child gender was again tested by entering at Step 4 the interaction term

between child gender and the ICC for Behaviors. Analyses were performed separately for mothers and fathers, and separately for child externalizing and internalizing problems as the outcome variables. Similar to the results obtained for the first research question, the interaction term (between child gender and the ICC for Behaviors) never approached significance in any of the four regressions. Only the results for the first three steps were therefore described below. Table 11 and Table 12 summarize the results (full models at Step 3) for child externalizing and internalizing problems respectively. No regression analyses were performed using parental disagreement in parenting goals (ICC for Goals) as predictors of child problems, as no significant relationship between the ICC for Goals and child behavior problems were identified at the bivariate level.

For children's externalizing problems (CBCL Externalizing), the full model with mothers' reports was significant, $R^2 = .28$, $F(6, 152) = 9.93$, $p < .001$. At Step 1, the variance accounted for in mothers' report of CBCL Externalizing scores by child gender, family income, mothers' DAS scores, and mothers' PDS IM scores was significant. At Step 2, mothers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .18$, $F \text{ Change}(1, 153) = 38.39$, $p < .001$. At Step 3, the ICC for Behaviors failed to account for significant incremental variance ($p = .57$). Examination of the beta weights in the full model indicated that only mothers' scores on the PPS and not the ICC for Behaviors accounted for significant unique variance in mothers' report of CBCL Externalizing scores. For fathers, the full model was significant $R^2 = .19$, $F(6, 152) = 5.96$, $p < .001$. At Step 1, the variance accounted for in fathers' report of CBCL Externalizing scores by child gender, family income, fathers' DAS scores, and fathers' PDS IM scores was significant. At Step 2, fathers' report on the PPS accounted for significant incremental variance, $R^2 \text{ Change} = .11$, $F \text{ Change}(1, 153) = 19.81$, $p < .001$. At Step 3, the ICC

for Behaviors failed to account for significant incremental variance ($p = .17$). Examination of the beta weights indicated that, similar to the model for mothers, only fathers' scores on the PPS and not the ICC for Behaviors accounted for significant unique variance in CBCL Externalizing.

For children's internalizing problems (CBCL internalizing), the full model with mothers' reports was significant $R^2 = .13$ $F(6, 152) = 3.79$, $p < .01$. At Step 1, the variance accounted for in mothers' report of CBCL Internalizing scores by child gender, family income, mothers' DAS scores, and mothers' PDS IM scores was not significant. At Step 2, mothers' report on the PPS accounted for significant incremental variance, R^2 Change = .09, F Change (1, 153) = 16.45, $p < .001$. At Step 3, the ICC for Behaviors failed to account for significant incremental variance ($p = .56$). Examination of the beta weights in the full model indicated that only mothers' scores on the PPS and not the ICC for Behaviors accounted for significant unique variance in mothers' report of CBCL Internalizing scores. For fathers, the full model was significant $R^2 = .12$, $F(6, 152) = 3.40$, $p < .01$. At Step 1, the variance accounted for in fathers' report of CBCL Internalizing scores by child gender, family income, fathers' DAS scores, and fathers' PDS IM scores was not significant ($p = .11$). At Step 2, fathers' report on the PPS accounted for significant incremental variance, R^2 Change = .06, F Change (1, 153) = 10.25, $p < .01$. At Step 3, the ICC for Behaviors failed to account for significant incremental variance ($p = .16$). Examination of the beta weights indicated that, similar to the model for mothers and both models for child externalizing problems, only fathers' scores on the PPS and not the ICC for Behaviors accounted for significant unique variance in fathers' report of CBCL Internalizing scores. Hence, although the ICC for Behaviors was significantly correlated with child externalizing problems (as reported by both mothers and fathers) and child internalizing problems (as reported by fathers)

at the bivariate level, none of these relationships remained significant once parenting effectiveness was accounted for in the regression models.

Discussion

This study was conceptualized in the context of acknowledging that a significant association is consistently reported in the literature between inter-parent childrearing disagreements and negative child outcomes (Mahoney, Jouriles, & Scavone, 1997; O’Leary & Vidair, 2005), yet little is understood about the underlying mechanism. This gap in our knowledge not only hinders the advancement of research in this area, but more importantly, limits our ability to translate existent findings into practical recommendations for targeting childrearing disagreement as a potential risk factor for child problems. The goal of this study was therefore to address two unanswered questions in the literature that must be clarified before the field could move forward to better understand the mechanism underlying the relationship between childrearing disagreement and child problems. The first question was whether childrearing disagreement is related to child problems when negative parenting behaviors are statistically controlled. Given the well-established finding that negative parenting practices are consistent predictors of child problems, one cannot suggest that inter-parent childrearing disagreement is linked with child behavior problems without ruling out the possible role of parenting effectiveness. Most of the existent studies, unfortunately, have failed to take into account the quality of each individual parent’s parenting skills. The second question was whether parental disagreement in parenting goals and parental disagreement in parenting behaviors would each relate independently to emotional and behavioral problems in young children. No published study has ever examined the content of parents’ childrearing disagreements; as a result, it is

unclear whether both types of child-related disagreements are independently associated with negative child outcomes.

The Role of Parenting Effectiveness

With respect to the first research question of whether inter-parent childrearing disagreement is related to child problems after controlling for parenting effectiveness, the results showed that childrearing disagreement, as measured by the CRD, continued to be associated consistently with externalizing problems in children after controlling for parenting effectiveness. Specifically, the regression models showed that, after controlling for parents' self-reported parenting effectiveness, childrearing disagreements accounted for 3 – 7% of the variance in parents' reports of children's externalizing problems. Although this effect may appear modest, it is important to remember that controlling for the significant correlation between parenting effectiveness and child externalizing problems, as well as the inclusion of other control variables (i.e., family income, parental marital adjustment, and parental impression management scores) render this a very conservative test of the potential contribution of childrearing disagreement. In fact, in three of the four regression models that tested child externalizing problems as the outcome variable, the effect sizes of parenting effectiveness and childrearing disagreements (as indicated by the partial correlations in Tables 6 and 8) were quite comparable, lending support for considering inter-parent childrearing disagreement as an important, independent correlate of externalizing problems in children. This argument is also strengthened by the fact that childrearing disagreements not only accounted for unique variance in children's externalizing problems when the same parent reported on both the predictor and the outcome variables, but the results continued to remain significant when different parents reported on the two variables. In other words, the unique association between childrearing disagreements and children's

externalizing problems above and beyond the contribution of parenting effectiveness was not simply a by-product of rater variance.

In contrast, the picture for child internalizing problems is much less consistent. Specifically, inter-parent childrearing disagreement, as measured by the Childrearing Disagreement Scale, was found to be uniquely associated with child internalizing problems in only one of the four regression models tested, and this was when fathers were the informants for both the predictor and the outcome variables. It is worth emphasizing again that, given all the predictors included as control variables, these regressions are purposefully designed as stringent tests of the predictive ability of both ineffective parenting and inter-parent childrearing disagreement. Although childrearing disagreements only accounted for 0.4 – 4% of the variance in child internalizing problems in these regressions, in two of the four regression models, these effect sizes were again comparable to the effect sizes of ineffective parenting (as indicated by the partial correlations in Tables 7 and 9). Thus, although overall it appears that the evidence is stronger and more consistent for childrearing disagreements being uniquely associated with child externalizing problems, there is some preliminary support for a unique association between childrearing disagreements and child internalizing problems as well.

One possible explanation for why inter-parent disagreement was linked more reliably with child externalizing than internalizing problems may have to do with the specific parenting constructs that have been found to predict different types of child problems. For example, intra-parent inconsistency in discipline (e.g., giving the child both positive and negative feedback in response to the same misbehavior across time; failing to follow through on commands) is well documented in the literature as being associated with child conduct problems and disruptive or

oppositional behaviors (Acker & O’Leary, 1996; Gardner, 1989; Lindahl, 1998). It is reasonable to hypothesize that a parallel phenomenon may exist when both parents are involved. That is, when parents disagree with each other about childrearing issues, they may inadvertently provide mixed feedback to their child regarding misbehavior (e.g., one parent attempts to discourage tantrums by ignoring the behavior, but the other parent reinforces the behavior with attention) thereby compromising the consistency of discipline across parents. In contrast, the parenting constructs that have more consistently been associated with child internalizing problems, such as anxiety and depression, are high levels of parental control (i.e., exerting pressure on children to feel and think in desired ways) and parental rejection and hostility (McLeod, Weisz, & Wood, 2007; Van der Bruggen, Stams, & Bögels, 2008). Contrary to the seemingly reasonable link between childrearing disagreements and inconsistent discipline, there does not seem to be a parsimonious explanation for why parents would exhibit greater control or rejection of their children as a result of inter-parent childrearing disagreement. Alternately, it has been speculated that children who witness the hostile exchanges between parents during conflicts may develop externalizing behaviors through social learning (O’Leary & Vidair, 2005). That is, children who observe their parents engage in poor conflict-resolution behaviors while discussing childrearing (and other) issues, may learn by modeling after their parents to act aggressively or be argumentative and oppositional.

A third possible explanation for the stronger links with externalizing child behavior would focus on the more noticeable and disruptive nature of externalizing behaviors which makes them more prone to elicit disagreements between parents than do child internalizing behaviors. That is, children who exhibit externalizing behaviors (such as hyperactivity, defiance, or aggression) are more likely to engage in behaviors that interfere with the activities of those

around them (e.g., refuses to go to bed at night, hits a sibling) and create problems that need to be “dealt with” by their caretakers. Parents of these children are therefore faced not only with more frequent demands to discipline their children, but also with the difficult task of knowing what strategies to use to manage these challenging behaviors. Both of these conditions could reasonably be expected to result in greater childrearing disagreements between parents. In contrast, children with internalizing behaviors (e.g., avoids eye contact, appears sad) are less disruptive to others and much less likely to cause problems that require disciplinary action from adults. Compared to children with externalizing behaviors, it may therefore be easier for parents of these children to agree on childrearing issues.

Related to this point are findings from previous research showing that during the preschool period, there is typically less concurrent cross-informant agreement and lower stability of problem ratings over time on reports of child internalizing problems, when compared with reports of child externalizing problems (Grietens, et al., 2004; Kerr, Lunkenheimer, & Olson, 2007). Reasons that have been put forth to explain this discrepancy include the lower prevalence rates and the less observable nature of internalizing behaviors in young children, as well as preschool children’s limited ability to report their negative emotions verbally (Campbell, 2002; Grietens, et al., 2004; Kerr, Lunkenheimer, & Olson, 2007). It is possible therefore that the weaker association between parental childrearing disagreements and child internalizing problems may be due in part to parents’ difficulty with accurately recognizing and identifying internalizing problems in their children at this age.

As reviewed in the introduction, several previous studies have examined the association between childrearing disagreement and child problems. Unfortunately, the measures used to

assess childrearing disagreement and child problems (and therefore the specific definition of these variables) differed widely across these studies, making it difficult to directly compare current results with previous findings. Nevertheless, it is worth noting that in the five studies that used the categories of *externalizing* and *internalizing* problems as their child outcome variables, three found inter-parent childrearing disagreements to be significantly correlated with both children's externalizing and internalizing problems at the bivariate level (Jenkins & Smith, 1991; Jouriles et al., 1991; Snyder, Klein, Gdowski, Faulstich, & LaCombe, 1988). On the other hand, the other two more recently conducted studies, which also used the CBCL to measure child problems, found inter-parent childrearing disagreement to be consistently associated with children's externalizing problems, but inconsistently with children's internalizing problems at the bivariate level (Mahoney, Jouriles, & Scavone, 1997; O'Leary & Vidair, 2005). These results are in line with the findings from the current study showing consistently significant bivariate correlations between inter-parent childrearing disagreement and children's externalizing problems, but less consistent correlations between inter-parent childrearing disagreement and children's internalizing problems.

Beyond bivariate correlations, the study by Deal, Halverson and Wampler (1988) was the only one that employed hierarchical regression to control for the contribution of parenting effectiveness in the association between childrearing disagreement and child problems. Contrary to the findings of the current study, these authors found that childrearing disagreement was not significantly associated with any of the child problems assessed in their study after controlling for ineffective parenting. Several methodological differences between the two studies may account for this discrepancy. First, different measures were used to assess the construct of childrearing disagreement. Specifically, Deal et al. used the correlations between parental ratings

on the CRPR as the measure of childrearing disagreement whereas the CRD was used in this study. Second, the child outcome variables included in Deal et al.'s study were quite different from the ones included in the current study. In fact, the child problem variables measured by Deal et al. (i.e., "total behavior problems", "emotional intensity", "persistence", and "social adaptability") did not correlate well with inter-parent childrearing disagreement even at the bivariate level. In this respect, Deal et al.'s findings are not only disparate from the results of the current study, but are also in contrast to the findings of most other studies in this area.

The only other study that also considered the role of individual parent's parenting practices is by O'Leary and Vidair (2005). They found unique relationships between childrearing disagreement and both children's externalizing and internalizing problems that remained significant after controlling for overreactive parenting practices. These results were not entirely consistent (i.e., only two of the four models involving child externalizing problems found a unique association, and similarly only two of the four models involving child internalizing problems found a unique association), however taken together with the results of the current study, they provide mounting evidence that inter-parent childrearing disagreement is not, as claimed by Deal, Halverson and Wampler (1988), an irrelevant predictor of child problems that contributes little information beyond what can be predicted by individual parent's parenting effectiveness. This is an important contribution to the literature because it allows researchers to have more confidence in the value of studying inter-parent childrearing disagreement and to move forward in taking the next step to more fully investigate the mechanism underlying the relationship between inter-parent childrearing disagreement and child behavior problems.

The Content of Disagreement

Turning now to the second research question, this is the first study to examine the specific content of inter-parent childrearing disagreements. In addition, the results of the current study provide support for using intraclass correlations (ICCs) between mothers' and fathers' ratings of their parenting behaviors and parenting goals as indices of agreements for these different aspects of parenting. The validity of this measurement method is evidenced by 1) the significant and negative correlations between both the ICCs for parenting behaviors and parenting goals, and parent ratings on the Childrearing Disagreement Scale, and 2) the significant and positive correlations between both the ICCs for parenting behaviors and parenting goals, and parent ratings on the Parenting Practices Scale⁶. The fact that the pattern of correlations for the ICC for parenting behaviors and the ICC for parenting goals are largely consistent suggests that any difference in their respective associations with child problems is mostly like not due to differences in the validity of the two variables. In other words, given that the ICC for parenting behaviors and the ICC for parenting goals have both demonstrated a similar pattern of associations with the parent variables, each ICC has adequate validity to be considered as potential predictors of child outcomes. Differences between how each of the ICCs relate to the child variables can thus be reasonably assumed to reflect differential associations between child behavior problems and the two types of parental disagreement, rather than a result of one of the ICCs being less valid than the other.

At the bivariate level, results showed that inter-parent disagreement about parenting behaviors but not parenting goals correlated significantly with child problems (with effects sizes

³ The correlation between ICC for Goals and fathers' ratings on the PPS is marginally significant at $p < .10$.

in the small to medium range). Specifically, inter-parent disagreement about parenting behaviors correlated significantly with children's externalizing problems as reported by both mothers and fathers, significantly with fathers' report of children's internalizing problems, and marginally with mothers' report of children's internalizing problems. This less consistent relationship with children's internalizing problems replicates the findings described earlier between inter-parent childrearing disagreement as measured by the Childrearing Disagreement Scale and children's internalizing problems. None of the correlations between inter-parent disagreement about parenting goals and child problems approached significance. In other words, parents who disagreed with each other on how they would respond behaviorally to child misbehavior had children who were rated consistently by both parents as having more externalizing problems, and by fathers as having more internalizing problems. On the other hand, whether or not parents agreed with each other on what they would like to accomplish in disciplinary situations did not appear to be associated with their children's level of problems. These findings suggest that with respect to predicting child problems, how much parents agree on their parenting goals is not as relevant as how consistently they behave in response to child misbehaviors, perhaps because the latter has a more proximal relationship to child behavior.

Beyond the bivariate correlations, results showed that when parenting effectiveness was controlled in a regression model (along with family income, parent ratings of general marital adjustment and impression management tendency), inter-parent disagreement in parenting behaviors, as measured by the ICC for parenting behaviors, no longer accounted for unique variance in any of the child problem variables. These findings are in contrast to the results obtained when inter-parent childrearing disagreement was measured by the Childrearing Disagreement Scale (CRD), which continued to be consistently significantly associated with

children's externalizing problems and in some cases children's internalizing problems after accounting for parenting effectiveness. Several reasons may underlie this difference. First, it is possible that the CRD tapped a dimension of inter-parent childrearing disagreement that was not assessed by the ICC for parenting behaviors; and that this dimension of childrearing disagreement is what is uniquely associated with child problems above and beyond the contribution of individual parents' parenting effectiveness. Close examination of the items on the CRD suggests that one likely candidate dimension is parents' sense of resentment or hostility toward their partner for their lack of support as a co-parent. For example, items such as "Not trusting my judgment in certain aspects of child-rearing", "Criticizing my child rearing practices from the sidelines", "Implying that some of our child's misbehavior is partly my fault" appear to touch on an aspect of the childrearing disagreement that is qualitatively distinct from and most likely not captured by a measure of how well parents agree on specific parenting behaviors. In support of this hypothesis is the fact that in this study, general marital adjustment is correlated more strongly and consistently with the CRD than with either the ICC for parenting behaviors or the ICC for parenting goals. In addition, one study that has examined the opposite of such inter-parent criticism found that active praises between parents for each others' parenting efforts (e.g., "You are a terrific mother/father", "I love the way you are helping him with his reading") are significantly associated with greater parent-reported sense of closeness with their child (Ehrenberg, Gearing-Small, Hunter, & Small, 2001).

Second, it is possible that the ICC for behaviors does not adequately capture the specific quality of parental disagreement in behavioral responses that is particularly relevant for child problems. For example, previous studies that have found inconsistent parenting to be a significant predictor of child behavior problems have generally operationalized "inconsistent

parenting” as either 1) providing both positive and negative feedback to the same child misbehavior, or 2) not following through on the parent’s own commands (Acker & O’Leary, 1996; Harvey, Danforth, Ulaszek, & Eberhardt, 2001). Although if these instances of mixed feedback or lax parenting occurred across parents, they would translate into a low ICC for parenting behaviors in the current dataset (e.g., one parent endorsed “give up or avoid the situation” while the other endorsed “remove privilege from my child” in response to the same scenario), most of the variability in the ICCs for parenting behaviors in the study reflected more subtle types of inter-parent inconsistencies (e.g., one parent endorsed “would certainly remove privilege from my child” while the other endorsed “may remove privilege from my child” in response to the same scenario; or one parent endorsed “would certainly demonstrate the appropriate behaviors to my child” while the other endorsed “would certainly explain to my child the natural consequences of his/her behavior” in response to the same scenario). Thus, although the ICC for parenting behaviors did not continue to be related to child behavior problems after controlling for parenting effectiveness, it is premature to conclude that parental disagreement in parenting behaviors is not uniquely associated with child problems. It may be that the way the construct was measured in the current study did not adequately capture inconsistency between members of dyads in the sense of contradictory feedback or discipline response across parents. This hypothesis also implies that there may be several acceptable ways of responding to children’s misbehaviors and these subtle differences between how parents discipline their children, so long as they do not contradict each other or let misbehaviors go unhandled, are not associated with child problems. Interestingly, the CRD, on the other hand, contains several items that may capture these more significant inter-parent inconsistencies (e.g., my spouse has irritated me by: “being too lenient with our child”, “letting some bit of misbehavior go on and on until I

finally do something about it myself”, “being too casual with our child about behavior that could lead to accidents”). This may be another reason why the CRD, but not the ICC for parenting behaviors, continued to account for significant variance in child behaviors problems after controlling for parenting effectiveness.

Finally, a third possibility is that the ICC for parenting behaviors, being based on a measure that has not been widely used in the literature, is simply not as reliable compared to the CRD. When tested in a regression model therefore, the variance that is left over in the ICC for behaviors after removing the variance that overlaps with the PPS (by controlling for the PPS in the model) may contain more error than the variance that is left over in the CRD in a regression model that similarly controls for the PPS. The greater proportion of error in the ICC for behaviors would thus reduce the likelihood that a significant association could be found between ICC for behaviors and child behavior problems.

Child Gender

Parents of both boys and girls were included in this study to examine whether the relationship between childrearing disagreement and child problems differed by child gender. First, as a main effect, mothers of boys reported higher levels of externalizing problems than mothers of girls. This is consistent with findings in the literature suggesting an emergence of a gender difference during the preschool period with greater prevalence and severity of externalizing problems in boys across cultures (LaFreniere et al., 2002; see review by Keenan & Shaw, 1997). When child gender was tested as moderator of the association between childrearing disagreements and child problems, however, the interaction effects were not significant in any of the regression models. As reviewed earlier, previous studies that have specifically tested the

effect of child gender on the relationship of childrearing disagreements to child problems have reported mixed findings. In support of a gender difference, Block, Block, and Morrison (1981) found that interparent childrearing disagreement was associated with better impulse control and coping abilities in boys but not girls. Similarly, Dadds and Powell (1991) found that interparent childrearing disagreement was associated with anxiety in boys but not girls. In contrast, other studies failed to find a significant moderating effect by child gender (Mahoney, Jouriles, & Scavone, 1997; O’Leary & Vidair, 2005; Snyder, Klein, Gdowski, Faulstich, & LaCombe, 1988). Comparison between these two groups of studies reveal that, although there is no consistent pattern of difference with respect to the samples included (i.e., both contain community and clinical samples of children between approximately 3-9 years of age), or the measures used to assess interparent childrearing disagreements (i.e., both contain studies using a variety of measures), studies that reported no significant moderating effects of child gender all used the dimensions of *externalizing* versus *internalizing* problems as the child outcome variables. In contrast, the constructs selected as dependent variables by Block, Block, and Morrison were ego control (i.e., ability to modulate impulses) and ego resiliency (i.e., ability to adapt to changes in the environment) – categories that do not map on well to the delineation of externalizing and internalizing behaviors that is more commonly used in recent studies. Although the child outcome variables chosen by Dadds and Powell (i.e., aggression, anxiety, and immaturity) are more similar to the contemporary conceptualization in this regard, aggression and anxiety still each represents respectively only part of the definition of externalizing and internalizing problems and this narrower definition may explain the presence of gender moderation in this study. Overall, it appears that when studies define child problems according to the broad categories of externalizing and internalizing problems, the relationships between inter-parent

childrearing disagreements and child problems are not moderated by child gender. It should be noted that interaction effects are often difficult to detect in regression analyses (Jaccard, Wan, & Turrisi, 1990). Therefore, future studies on inter-parent childrearing disagreement should continue to explore the potential effect of child gender, as well as to examine whether child gender may have a moderating effect in samples of other age ranges.

Limitations

There are a number of shortcomings in this study. First, given the decision to obtain information on parenting behaviors, childrearing disagreement, and child problems directly from both parents, only couples who provided consent from both members were included in the study. Although the current sample did contain a subset of couples who scored poorly on the measure of marital adjustment, it is likely that couples with significant levels of marital problems and childrearing disagreements would not have presented themselves for enrollment in a study focused on interparent agreements in childrearing and were therefore underrepresented in this study. The generalizability of current findings is therefore limited to only intact families with primarily moderate levels of marital and childrearing conflicts. It is worth noting that even in this community sample, significant associations were found between inter-parent childrearing disagreement and child problems; it can be speculated that larger effect sizes may be observed in a sample including couples with higher levels of conflicts. Second, the cross-sectional design of the study does not allow conclusions to be made with respect to the directionality of the associations. As mentioned above, although it is reasonable to hypothesize that greater childrearing disagreement between parents could contribute to problem behaviors in children, it is also likely that children with behavior problems are more challenging to parent and therefore make consensus on childrearing issues more difficult to achieve. Future longitudinal studies are

needed to clarify the direction of causality in these relationships. Third, the majority of the families included in this study were from European or Asian backgrounds which limits the generalizability of the findings to other cultural groups less represented by the current sample. Fourth, only self-report measures were used in this study. Although the inclusion of both mother and father data is an important strength relative to studies that relied solely on mothers' reports of marital adjustment and inter-parent childrearing disagreements, the next step should be to include observational assessment of the constructs measured in this study (e.g., observer ratings of the degree to which parents are supportive or critical of each other's interaction with their child, observational data on how mothers and fathers respond behaviorally to an incident of child misbehavior) and examine whether the findings could be replicated. Finally, although the significant associations between the ICCs and the CRD support the validity of using the ICCs as indices of interparent disagreement, it is difficult to interpret the clinical meaning of actual values of ICCs due to the lack of normative data on this measure. That is, all couples most likely disagree to some extent about childrearing issues, but the ICCs are not informative about the specific level at which interparent childrearing disagreement should be considered clinically significant.

Conclusions and Future Directions

Results from the current study show that regardless of how effective individual parents' parenting practices are, greater inter-parent childrearing disagreements are associated with greater problems in preschool boys and girls. Although it is not yet clear which specific dimensions of inter-parent childrearing disagreement may be responsible for the unique association with child problems, the fact that childrearing disagreement is independently related to child problems when tested with such stringent control over other predictors provides a strong

argument for more research attention to this variable. As mentioned above, future studies should explore whether parents' perceptions of being criticized for their parenting abilities by their partners and the negative emotions associated with such perceptions play a role in the link between childrearing disagreement and child problems. This hypothesized dimension of childrearing disagreements is similar to the construct of "undermining coparenting" defined generally in the literature as parental behaviors that interfere with the other parent's attempt to achieve parenting goals, or parenting behaviors that are done for the purpose of criticizing or denigrating the other parent's parenting capacity (Belsky, Crnic, & Gable, 1995; Van Egeren & Hawkins, 2004). Several measures of coparenting contain a subscale that assesses undermining coparenting specifically (Van Egeren & Hawkins, 2004). These should be incorporated in future studies on childrearing disagreement to examine whether a unique association exists between this particular dimension of childrearing disagreement and child problems. More research also is needed to examine why childrearing disagreements are related much more consistently to externalizing than to internalizing problems in children and the direction of causality in these associations. For example, couples with high vs. low frequencies of childrearing disagreements could be followed longitudinally, and child problems in the two groups could be compared at a later time point, controlling for the level of child problems at time one. The question of causality could also be addressed in the context of treatment studies by tracking changes in child behavior problems before and after the parents receive intervention that targets inter-parent childrearing disagreement.

Clinically, results from the current study suggest that when working with families of children with behavior problems, it is important to not just attend to the parenting skills of individual parents in isolation, but also to assess how well parents are able to negotiate and

resolve disagreements regarding child-related issues. Although parental agreement in parenting behaviors was not found to be associated independently with child problems, at the bivariate level, it was correlated significantly with both children's externalizing problems (as reported by both parents) and internalizing problems (as reported by fathers). Taken together with the minimal correlations found between parental agreement in parenting goals and child problems, these results suggest that clinicians wishing to assist parents in resolving their childrearing disagreements should prioritize parental disagreements regarding behavioral responses to specific instances of child misbehaviors as the target of treatment over disagreements in parenting goals, which may be more abstract and distal to child behaviors.

At a broader level, although treatment programs for all types of child problems may benefit from the added component of addressing inter-parent childrearing disagreement, findings from this study suggest that it is particularly relevant for treatments of child externalizing problems. When conducting behavioral parent training – an empirically supported treatment option for childhood externalizing problems (Eyberg, Nelson, & Boggs, 2008) – it may be particularly worthwhile to attend to issues of child-related conflicts between parents and to directly address and work on resolving these disagreements as part of the treatment protocol. Given the alternate possibility that child behavior problems may cause disagreement between parents about childrearing issues, it may also be important for clinicians to normalize the anxiety and frustration that parents may experience as a result of difficulty attaining agreement about child-related issues. Regardless of the direction of causation, these results suggest that an explicit assessment of the degree of childrearing disagreement between parents is warranted when working with families of children with behavior problems.

More generally, findings from this study highlight the importance of including fathers whenever possible in working with families to address child problems. As the results clearly demonstrate, child problems were significantly related to poor parenting effectiveness whether these parent variables were reported by mothers or by fathers. Leaving one of the parents out of the picture in treatment would thus mean addressing only half of the parenting behaviors that affect the child. The case is even stronger, of course, when the target of intervention is inter-parent childrearing disagreement, which by definition, is a dyadic problem that needs to be addressed with both parties. A recent study found that couples who underwent behavioral couple therapy not only experienced a decrease in childrearing conflicts, but that such change was related to improved child functioning during the treatment period. More importantly, the decrease in childrearing conflicts was found to be the mediator between increased marital satisfaction and improved child adjustment (Gattis, Simpson, & Christensen, 2008). This encouraging evidence suggests that this is indeed an area worthy of further research effort and has practical implications for improving child functioning. With a better understanding of the precise mechanism underlying the association of inter-parent childrearing disagreement and child problems, a specific and time-limited module that focuses on enhancing parents' ability to resolve childrearing disagreements may be developed and incorporated into existent treatment protocols for child problems.

References

- Abidin, R. R., & Brunner, J. F. (1995). Development of a Parenting Alliance Inventory. *Journal of Clinical Child Psychology, 24*, 31–40.
- Acker, M. M., & O'Leary, S. G. (1996). Inconsistency of mothers' feedback and toddlers' misbehaviour and negative affect. *Journal of Abnormal Child Psychology, 24*, 703-714.
- Achenbach, T. M., & Rescorla, L. A. (2000). *Manual for the ASEBA Preschool Forms and Profiles*. Burlington, VT: University of Vermont.
- Ainsworth, M. & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*, 333-341.
- August, G. J., Realmuto, G. M., Joyce, T., Hektner, J. M. (1999). Persistence and desistance of oppositional defiant disorder in a community sample of children with ADHD. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 1262-1270.
- Bandura, A. (1997). *Self-efficacy, the exercise of control*. New York, NY: W.H. Freeman & Company.
- Baumrind, D. (1989). The permanence of change and the impermanence of stability. *Human Development, 32*, 187-195.
- Beitel, A. H., & Parke, R. D. (1998). Paternal involvement in infancy: The role of maternal and paternal attitudes. *Journal of Family Psychology, 12*, 268-288.
- Belsky, J., Crnic, K., & Gable, S. (1995). The determinants of coparenting in families with toddler boys: Spousal differences and daily hassles. *Child Development, 66*, 629-642.
- Belsky, J., Rovine, M., & Fish, M. (1989). The developing family system. In M. Gunnar & E.

- Thelen (Eds.), *Minnesota symposium on child psychology: Vol. 22. Systems and development* (pp. 119-166). Hillsdale, NJ: Erlbaum.
- Belsky, J., Woodworth, S., & Crnic, K. (1996). Trouble in the second year: Three questions about family interaction. *Child Development, 67*, 556-578.
- Block, J. H. (1965). *The Child Rearing Practices Report*. Berkeley: Institute of Human Development, University of California.
- Block, J. H., Block, J., & Morrison, A. (1981). Parental agreement-disagreement on child-rearing orientations and gender-related personality correlates in children. *Child Development, 52*, 965-974.
- Bonds, D. D., & Gondoli, D. M. (2007). Examining the process by which marital adjustment affects maternal warmth: the role of coparenting support as a mediator. *Journal of Family Psychology, 21*, 288-296.
- Bornstein, M. H. (2002). Preface. In M. H. Bornstein (Ed.), *Handbook of parenting: vol. 1 Children and parenting*. New Jersey: Lawrence Erlbaum Associates.
- Braithwaite, D., Emery, J., de Lusignan, S., & Sutton, S. (2003). Using the Internet to conduct surveys of health professionals: a valid alternative? *Family Practice, 20*, 545-551.
- Campbell, S. B. (2002). *Behavior problems in preschool children. Clinical and developmental issues* (2nd edition). New York, NY: Guilford.
- Cassano, M., Adrian, M., Veits, G., & Zeman, J. (2006). The inclusion of fathers in the empirical

- investigation of child psychopathology: an update. *Journal of Clinical Child and Adolescent Psychology*, 35, 583-589.
- Cassano, M., Perry-Parrish, C., & Zeman, J. (2007). Influence of gender on parental socialization of children's sadness regulation. *Social Development*, 16, 210-231.
- Cobanoglu, C., Warde, B., & Moreo, P. J. (2001). A comparison of mail, fax, and Web-based survey methods. *International Journal of Market Research*, 43, 441-452.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Earlbaum Associates.
- Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist*, 55, 218-232.
- Coplan, R. J., Hastings, P. D., Lagac é-S éguin, D. G., & Moulton, C. E. (2002). Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice*, 2, 1-26.
- Cummings, E. M. (1994). Marital conflict and children's functioning. *Social Development*, 3, 16-59.
- Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2004). Everyday marital conflict and child aggression. *Journal of Abnormal Child Psychology*, 32, 191-202.
- Dadds, M. R., & Powell, M. B. (1991). The relationship of interparental conflict and global marital adjustment to aggression, anxiety, and immaturity in aggressive and nonclinic

- children. *Journal of Abnormal Child Psychology*, *19*, 553-567.
- Davies, P. T., & Cummings, M. (1994). Marital conflict and child adjustment: An emotional security hypothesis. *Psychological Bulletin*, *116*, 387-411.
- Davies, P. T., Forman, E. M., Rasi, J. A., & Stevens, K. I. (2002). Assessing children's emotional security in the interparental relationship: the security in the interparental relationship scales. *Child Development*, *73*, 544-562.
- Deal, J. E., Halverson, C. F., & Wampler, K. S. (1989). Parental agreement on child-rearing orientations: Relations to parental, marital, family, and child characteristics. *Child Development*, *60*, 1025-1034.
- Dix, T. H. (1992). Parenting on behalf of the child: Empathic goals in the regulation of responsive parenting. In I. E. Sigel, A. V. McGillicuddy-DeLisi, & J. J. Goodnow (Eds.), *Parental belief systems: The psychological consequences for children* (Vol. 2, pp. 319-346). Hillsdale, NJ: Erlbaum.
- Duhig, A. M., Renk, K., Epstein, M. K., Phares, V. (2000). Interparental agreement on internalizing, externalizing, and total behavior problems: A meta-analysis. *Clinical Psychology: Science and Practice*, *7*, 435-453.
- Dumas, J. E., & Lechowicz, J. G. (1989). When do noncompliant children comply? Implications for family behavior therapy. *Child and Family Behavior Therapy*, *11*, 21-38.
- Ehrenberg, M. F., Gearing-Small, M., Hunter, M. A., & Small, B. J. (2001). Childcare task division and shared parenting attitudes in dual-earner families with young children. *Family Relations*, *50*, 143-153.

- Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology, 37*, 215-237.
- Feinberg, M. E. (2003). The internal structure and ecological context of coparenting: a framework for research and intervention. *Parenting: Science and Practice, 3*, 95-131.
- Feinberg, M. E., Button, T. M. M., Neiderhiser, J. M., Reiss, D., & Hetherington, E. M. (2007). Parenting and adolescent antisocial behavior and depression: Evidence of genotype \times parenting environment interaction. *Archives of General Psychiatry, 64*, 457-465.
- Feinberg, M., Kan, M. L., & Hetherington, E. M. (2007). Longitudinal study of coparenting conflict on adolescent maladjustment. *Journal of Marriage and Family, 69*, 687-702.
- Floyd, F. J., Gilliom, L. A., & Costigan, C. L. (1998). Marriage and the parenting alliance: Longitudinal prediction of change in parenting perceptions and behaviors. *Child Development, 69*, 1461-1479.
- Gable, S., Belsky, J., & Crnic, K. (1992). Marriage, parenting, and child development: Progress and prospects. *Journal of Family Psychology, 5*, 276-294.
- Galambos, N. L., Barker, E. T., Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*, 578-594.
- Gardner, F. E. M. (1989). Inconsistent parenting: Is there evidence for a link with children's conduct problems? *Journal of Abnormal Child Psychology, 17*, 223-233.

- Gattis, K. S., Simpson, L. E., & Christensen, A. (2008). What about the kids? Parenting and child adjustment in the context of couple therapy. *Journal of Family Psychology, 22*, 833-842.
- Ge, X., Conger, R. D., Cadoret, R. J., Neiderhiser, J. M., Yates, W., Troughton, E., et al. (1996). The developmental interface between nature and nurture: a mutual influence model of child antisocial behavior and parent behaviors. *Developmental Psychology, 32*, 574-589.
- Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review, 106*, 458-490.
- Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child and Adolescent Psychology, 33*, 412-425.
- Grietens, H., Onghena, P., Prinzie, P., Gadeyne, E., Van Assche, V., Ghesquiere, P., et al. (2004). Comparison of mothers', fathers', and teachers' reports on problem behavior in 5- to 6-year-old children. *Journal of Psychopathology and Behavioral Assessment, 26*, 137-146.
- Grossman, K., Grossman, K. E., Fremmer-Bombik, E., Kindler, H., Scheuerer-Engelisch, H., & Zimmermann, P. (2002). The uniqueness of the child-father attachment relationship: Father's sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development, 11*, 307-331.

- Grusec, J. E., & Goodnow, J. J. (1994). The impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*, 4-19.
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin, 108*, 267-290.
- Harvey, E., Danforth, J. S., Ulaszek, W. R., & Eberhardt, T. L. (2001). Validity of the parenting scale for parents of children with attention-deficit/hyperactivity disorder. *Behaviour Research and Therapy, 39*, 731-743.
- Hastings, P. D., & Grusec, J. E. (1998). Parenting goals as organizers of responses to parent-child disagreement. *Developmental Psychology, 34*, 465-479.
- Hastings, P., & Rubin, K. (1999). Predicting mother's beliefs about preschool aged children's social behavior: Evidence for maternal attitudes moderating child effects. *Developmental Psychology, 70*, 722-741.
- Hayden, L. C., Schiller, M., Dickstein, S., Seifer, R., Sameroff, A. J., Miller, I., et al. (1998). Levels of family assessment: I. Family, marital, and parent-child interaction. *Journal of Family Psychology, 12*, 7-22.
- Holden, G. & Miller, P. (1999). Enduring and different: A meta-analysis of the similarity in parents' child rearing, *Psychological Bulletin, 125*(2), 223-254.
- Hollingshead, A. B. (1975). *Four factor index of social status*. New Haven, CT: Yale University Sociology Department.

- Jaccard, J., Wan, C. K., & Turrisi, R. (1990). The detection and interpretation of interaction effects between continuous variables in multiple regression.
- Jenkins, J. M., & Smith, M. A. (1991). Marital disharmony and children's behavior problems: aspects of a poor marriage that affect children adversely. *Journal of Child Psychology and Psychiatry*, 32, 793-810.
- Jouriles, E. N., Murphy, C. M., Farris, A. M., Smith, D. A., Richters, J. E., & Waters, E. (1991). Marital adjustment, parental disagreements about child rearing, and behavior problems in boys: increasing the specificity of the marital assessment. *Child Development*, 62, 1424-1433.
- Katz, L. F., & Low, S. M. (2004). Marital violence, co-parenting, and family-level processes in relation to children's adjustment. *Journal of Family Psychology*, 18, 372-382.
- Kazdin, A. (1997). Parent management training: Evidence, outcomes, and issues. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1349-1356.
- Keenan, K., & Shaw, D. (1997). Developmental and social influences on young girls' early problem behaviors. *Psychological Bulletin*, 121, 95-113.
- Kerr, D. C. R., Lunkenheimer, E. S., & Olson, S. L. (2007). Assessment of child problem behaviors by multiple informants: A longitudinal study from preschool to school entry. *Journal of Child Psychology and Psychiatry*, 48, 967-975.
- Kiesler, S., & Sproull, L. S. (1986). Response effects in the electronic survey. *Public Opinion Quarterly*, 50, 402-413.

- King, C. A., Radpour, L., Naylor, M. W., Segal, H. G., & Jouriles, E. N. (1995). Parents' marital functioning and adolescent psychopathology. *Journal of Consulting and Clinical Psychology, 63*, 749-753.
- Kirsch, S. E. D., & Brandt, P. A. (2002). Telephone interviewing: A method to research fathers in family research. *Journal of Family Nursing, 8*, 73-84.
- Knapp, H., & Kirk, S. A. (2003). Using paper and pencil, Internet and touch-tone phones for self-administered surveys: Does methodology matter? *Computers in Human Behavior, 19*, 117-134.
- Kopp, C. (1992). Emotional distress and control in young children. *New Directions for Child Development, 55*, 41-56.
- Kuczynski, L. (1984). Socialization goals and mother-child interaction: Strategies for long-term and short-term compliance. *Developmental Psychology, 20*, 1061-1073.
- LaFreniere, P., Masataka, N., Butovskaya, M., Chen, Q., Dessen, M. A., Atwanger, K., et al. (2002). Cross-cultural analysis of social competence and behavior problems in preschoolers. *Early Education and Development, 13*, 201-220.
- Lamb, M. E. (1977). Father-infant and mother-infant interaction in the first year of life. *Child Development, 48*, 167-181.
- Lamb, M. E. (Ed.). (1997). *The role of the father in child development* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

- Lamb, M. E., & Tamis-Lemonda, C. S. (2004). The role of the father: An introduction. In M. E. Lamb (Ed.), *The role of the father in child development* (4th ed., pp. 1-31). New York: Wiley.
- Lee, C. M., Beauregard, C., & Bax, K. A. (2005). Child-related disagreements, verbal aggression, and children's internalizing and externalizing behavior problems. *Journal of Family Psychology, 19*, 237-245.
- Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association, 83*, 1198-1202.
- Lindahl, K. M. (1998). Family process variables and children's disruptive behavior problems. *Journal of Family Psychology, 12*, 420-436.
- MacDonald, K., & Parke, R. D. (1984). Bridging the gap: Parent-child play interaction and peer interactive competence. *Child Development, 55*, 1265-1277.
- Mahoney, A., Jouriles, E. N., & Scavone, J. (1997). Marital adjustment, marital discord over childrearing, and child behavior problems: moderating effects of child age. *Journal of Clinical Child Psychology, 26*, 415-423.
- Margolin, G., Gordis, E. B., & Richard, S. J. (2001). Coparenting: a link between marital conflict and parenting in two-parent families. *Journal of Family Psychology, 15*, 3-21.
- McConnell, M. C., & Kerig, P. K. (2002). Assessing coparenting in families of school-age children: validation of the coparenting and family rating system. *Canadian Journal of Behavioural Science, 34*, 44-58.

- McHale, J. P. (1995). Coparenting and triadic interactions during infancy: the roles of marital distress and child gender. *Developmental Psychology, 31*, 985-996.
- McHale, J. P., Rao, N., & Krasnow, A. D. (2000). Constructing family climates: Chinese mothers' reports of their co-parenting behavior and preschoolers adaptation. *International Journal of Behavioral Development, 24*, 111-118.
- McHale, J. P., & Rasmussen, J. L. (1998). Coparental and family group-level dynamics during infancy: early family precursors of child and family functioning during preschool. *Development and Psychopathology, 10*, 39-59.
- McLeod, B., D., Weisz, J. R., & Wood, J. J. (2007). Examining the association between parenting and childhood depression: A meta-analysis. *Clinical Psychology Review, 27*, 986-1003.
- Meyerson, P., & Tryon, W. W. (2003). Validating Internet research: A test of the psychometric equivalence of Internet and in-person samples. *Behavior Research Methods, Instruments & Computer, 35*, 614-602.
- O'Leary, S. G., & Vidair, H. B. (2005). Marital adjustment, child-rearing disagreements, and overreactive parenting: predicting child behavior problems. *Journal of Family Psychology, 19*, 208-216.
- Parke, R. D. (2002) Fathers and families. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 3: Being and becoming a parent* (2nd ed., pp. 27-73). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

- Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *A Social interactional approach: Volume 4: Antisocial boys*. Eugene, OR: Castalia.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17-59). San Diego: Academic Press.
- Paulhus, D. L. (2002). *Paulhus Deception Scales*. Toronto: Multi-Health Systems.
- Pettit, F. A. (2002). A comparison of world-wide web and paper-and-pencil personality questionnaires. *Behavior Research Methods, Instruments & Computers*, 34, 50-54.
- Phares, V., Lopez, E., Fields, S., Kamboukos, D., & Duhig, A. M. (2005). Are fathers involved in pediatric psychology research and treatment? *Journal of Pediatric Psychology*, 30, 631-643.
- Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems. *Journal of Abnormal Child Psychology*, 8, 287-295.
- Reid, W. J., & Crisafulli, A. (1990). Marital discord and child behavior problems: A meta-analysis. *Journal of Abnormal Child Psychology*, 18, 105-117.
- Richman, E. R., & Rescorla, L. (1995). Academic orientation and warmth in mothers and fathers of preschoolers: Effects in academic skills and self-perceptions of competence. *Early Education and Development*, 6, 197 – 213.
- Russell, A., & Russell, G. (1987). Mother-child and father-child relationships in middle childhood. *Child Development*, 58, 1573-1585.

- Schoppe, S., Mangelsdorf, S. C., & Frosch, C. A. (2001). Coparenting, family process, and family structure: implications for preschoolers' externalizing behavior problems. *Journal of Family Psychology, 15*, 526-545.
- Schoppe-Sullivan, S. J., Mangelsdorf, S. C., Frosch, C. A., & McHale, J. L. (2004). Associations between coparenting and marital behavior from infancy to the preschool years. *Journal of Family Psychology, 18*, 194-207.
- Serene, J. A., Ashtari, M. S., Szeszko, P. R., & Kumra, S. (2007). Neuroimaging studies of children with serious emotional disturbances: A selective review. *The Canadian Journal of Psychiatry, 52*, 135-145.
- Siegel, M. (1987). Are sons and daughters treated more differently by fathers than by mothers? *Developmental Review, 7*, 183-209.
- Siegel, I. E., McGillicuddy-DeLisi, A. V., & Goodnow, J. J. (Eds.). (1992). *Parental belief systems: The psychological consequences for children, Vol. 2*. Hillsdale, NJ: Erlbaum.
- Snyder, D. K. (1981). *Manual for the Marital Satisfaction Inventory*. Los Angeles: Western Psychological Services.
- Snyder, D. K., Klein, M. A., Gdowski, C. L., Faulstich, C., & LaCombe, J. (1988). Generalized dysfunction in clinic and nonclinic families; a comparative analysis. *Journal of Abnormal Child Psychology, 16*, 97-109.
- Spanier, G. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38*, 15-28.

Statistics Canada. (2002, July 25). *The Daily: Household Internet use survey (2001)*.

Retrieved September 22, 2006 from

<http://www.statcan.ca/Daily/English/020725/d020725a.htm>

Statistics Canada (2006). *Internet use by individuals, by location of access, by province*

(Saskatchewan, Alberta, and British Columbia). Retrieved September 22, 2007, from

<http://www40.statcan.ca/101/cst01/comm14c.htm>

Statistics Canada (2006). *Median total income, by family type, by province and territory*.

Retrieved June 29, 2008, from <http://www40.statcan.ca/101/cst01/famil108b.htm>

Strayhorn, J. M., & Weidman, C. S. (1988). A parent practices scale and its relation to parent and child mental health. *Journal of the American Academy of Child & Adolescent Psychiatry*, 27, 613-618.

Van der Bruggen, C. O., Stams, G. J. J. M., & Bögels. S. M. (2008). The relation between child and parent anxiety and parental control: a meta-analytic review. *Journal of Child Psychology and Psychiatry*, 49, 1257-1269.

Van Egeren, L. A. & Hawkins D. P. (2004). Coming to terms with coparenting: Implications of definition and measurement. *Journal of Adult Development*, 11, 165-178.

Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Wamboldt, M. Z., & Wamboldt, F. S. (2000). Role of the family in the onset and outcome of childhood disorders: Selected research findings. *Journal of the American Academy of*

Child and Adolescent Psychiatry, 39, 1212-1219.

Table 1

Demographic Characteristics of the Sample

Variables	Total (N = 160)	Boys (n = 84)	Girls (n = 76)	Statistic (df)	<i>p</i>	Effect Size
<i>Age</i>						
Child [Mean in Months (<i>SD</i>)]	44.51 (12.71)	44.23 (12.55)	44.82 (12.97)	<i>t</i> (158) = -.29	.77	<i>d</i> = 0.05
Mother [Mean in Years (<i>SD</i>)]	35.49 (4.88)	35.24 (5.48)	35.78 (4.14)	<i>t</i> (158) = -.70	.49	<i>d</i> = 0.11
Father [Mean in Years(<i>SD</i>)]	34.87 (5.04)	34.82 (5.20)	34.92 (4.90)	<i>t</i> (158) = -.12	.90	<i>d</i> = 0.02
Parents' Marital Status (%)				$\chi^2(1) = .55$	.46	$\Phi = .06$
Married	90.00	91.67	88.16			
Common-law	10.00	8.33	11.84			

Variables	Total (N = 160)	Boys (n = 84)	Girls (n = 76)	Statistic (df)	<i>p</i>	Effect Size
Parent Education (Mother/Father) (%)				$\chi^2(3) = 4.07 / \chi^2(3) = 3.23$	.26/.36	<i>V</i> = .16/.14
High-school Graduate or Less	8.13/8.13	10.71/5.95	5.26/10.53			
Partial College	31.24/30.00	25.00/26.19	38.16/34.21			
College Graduate	42.50/36.24	45.24/38.10	39.47/34.21			
Graduate/Professional School	18.13/25.63	19.05/29.76	17.11/21.05			
Yearly Family Income (%)				$\chi^2(4) = 6.09$	.19	<i>V</i> = .20
< 34,999	10.00	11.90	7.89			
35,000 – 49,999	13.13	11.90	14.47			
50,000 – 74,999	31.25	38.10	23.68			
75,000 – 99,999	21.25	17.86	25.00			
> 100,000	23.75	19.05	28.96			
Missing	.60	1.19	0.00			

Variables	Total (N = 160)	Boys (n = 84)	Girls (n = 76)	Statistic (df)	p	Effect Size
Parent Is Currently Employed (Mother/Father) (%)				$\chi^2(1) = .24 / \chi^2(1) = .02$	.62/.88	$\Phi = .04/.01$
Yes	62.50/93.10	60.71/92.86	64.47/93.42			
No	37.50/6.90	39.29/7.14	35.53/6.58			
Child Has Younger Sibling(s) (%)				$\chi^2(1) = .27$	.61	$\Phi = .04$
Yes	60.00	60.90	57.90			
No	40.00	38.10	42.10			
Parent's Relationship to Child (Mother/Father) (%)				$\chi^2(1) = 3.38 / \chi^2(2) = 4.53$	.07/.10	$V = .15/.17$
Biological Parent	97.50	100.00/100.00	96.05/94.74			
Adoptive Parent	1.25	0.00/0.00	3.95/2.63			
Step Parent	1.25	0.00/0.00	0.00/2.63			

Variables	Total (N = 160)	Boys (n = 84)	Girls (n = 76)	Statistic (df)	<i>p</i>	Effect Size
Recruitment Method (%)				$\chi^2(3) = 4.05$	.26	<i>V</i> = .21
Newspaper Advertisement	21.25	23.81	18.42			
Libraries, Community Centers & Family Places	51.88	55.95	47.36			
Coffee Shops	13.75	10.71	17.11			
Local Websites	13.12	9.53	17.11			
Child Ethnicity (%)				$\chi^2(2) = 6.46$	.04	<i>V</i> = .20
Euro-Canadian	53.75	48.81	59.21			
Asian	21.88	29.76	13.16			
Mixed	20.62	17.86	23.68			
Latino	3.75	3.57	3.95			

Variables	Total (N = 160)	Boys (n = 84)	Girls (n = 76)	Statistic (df)	p	Effect Size
Parent Ethnicity (Mother/Father) (%)				$\chi^2(2) = 7.10 / \chi^2(2) = 6.04$	.03/.05	V = .21/.19
Euro-Canadian	63.75/62.50	54.76/55.95	73.68/69.73			
Asian	28.13/27.50	36.90/35.71	18.42/18.42			
Mixed	4.37/3.75	3.57/4.76	5.26/2.63			
Latino	3.75/4.37	4.77/2.38	2.64/6.58			
African - Canadian	0.00/1.25	0.00/1.20	0.00/1.32			
First Nations	0.00/0.63	0.00/0.00	0.00/1.32			
Identity as Canadian						
Mother [Mean (SD)]	8.04 (2.80)	7.62 (2.97)	8.51 (2.53)	t (157.47) = -.206	.04	d = .32
Father [Mean (SD)]	8.21 (2.70)	8.20 (2.61)	8.21 (2.81)	t (158) = -.02	.99	d = <.01

Table 2

Summary of the Questionnaire Acronyms

Acronym	Construct	Measure
CBCL	Child problems	Child Behavior Checklist
CCR	Childrearing disagreement	Conflict over Childrearing (subscale of Marital Satisfaction Inventory)
CRD	Childrearing disagreement	Childrearing Disagreement Scale
CRPR	Childrearing disagreement	Child-rearing Practices Report
DAS	Marital adjustment	Dyadic Adjustment Scale
PBGQ	Parenting behaviors and parenting goals	Parenting Behaviors and Goals Questionnaire
PDS IM	Impression management	Pauhus Deception Scales - Impression Management scale
PPC	Childrearing disagreement	Parent Problem Checklist
PPS	Parenting effectiveness	Parenting Practices Scale

Table 3

Mean Levels of Inter-Parent Agreement on Parenting Behaviors and Goals, Childrearing Disagreement, Parenting Practices, Marital Adjustment, Child Problems, and Impression Management Tendency

	Total (N = 160)		Boys (n = 84)			Girls (n = 76)			<i>t</i> (158)	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>			
Mother-Father ICC (Behaviors)	.57	.17	.55	.17	.09 – .89	.59	.16	.23 – .84	-1.48	.14	.24
Mother-Father ICC (Goals)	.38	.28	.36	.27	-.23 – .86	.40	.28	-.19 – 1.00	-.85	.40	.26
CRD											
Mother	39.64	12.91	41.70	13.72	21.00 – 81.00	37.35	11.61	22.00 – 72.00	2.17	.03	1.01
Father	36.46	11.19	37.91	12.19	21.00 – 70.00	34.86	9.79	21.00 – 61.00	1.74	.09	1.00
PPS											
Mother	145.34	13.91	142.08	14.59	106.39 – 175.48	148.94	12.23	114.06 – 173.29	-3.20	<.01	1.21
Father	140.46	13.78	138.25	13.88	105.40 – 175.48	142.91	13.34	104.13 – 174.39	-2.16	.03	1.23

	Total (N = 160)		Boys (n = 84)			Girls (n = 76)			<i>t</i> (158)	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>			
DAS											
Mother	105.44	13.86	103.67	13.72	65.00 – 134.00	107.39	13.85	63.00 – 133.00	-1.70	.09	.27
Father	105.31	12.24	104.93	12.55	77.00 – 137.00	105.73	11.96	61.00 – 127.00	-.41	.68	.06
CBCL Ext.											
Mother	10.97	7.86	12.88	8.05	1.00 – 30.00	8.86	7.11	0.00 – 37.00	3.33	<.01	.53
Father	11.37	6.98	12.26	7.28	0.00 – 27.00	10.39	6.55	0.00 – 28.00	1.71	.09	.27
CBCL Int.											
Mother	8.24	6.50	9.07	6.95	0.00 – 28.00	7.32	5.86	0.00 – 31.00	1.71	.09	.27
Father	8.88	6.19	9.48	6.99	0.00 – 31.00	8.22	5.13	0.00 – 23.00	1.30	.20	.21
PDS IM											
Mother	9.01	3.75	8.77	3.74	.00 – 18.00	9.26	3.77	.00 – 18.00	-.82	.41	.13
Father	8.09	4.11	7.85	4.20	.00 – 17.00	8.36	4.03	.00 – 17.00	-.78	.44	.12

Note. ICC = Intra-Class Correlations; CRD = Childrearing Disagreement Scale; PPS = Parenting Practices Scale; DAS = Dyadic Adjustment Scale; CBCL Ext. = Child Behavior Checklist Externalizing Scale; CBCL Int. = Child Behavior Checklist Internalizing Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale.

Table 4

Bivariate Correlations between Parents' Agreement in Parenting Behaviors and Goals, Childrearing Disagreement, Marital Adjustment, and Parenting Practices

	1	2	3	4	5	6	7	8
Mother-Father ICC for Behaviors (1)	-	.30**	-.24**	-.18*	.34**	.31**	.20*	<.01
Mother-Father ICC for Goals (2)		-	-.24**	-.18*	.32**	.13 [†]	.15 [†]	.03
Mother CRD (3)			-	.45**	-.43**	-.17*	-.53**	-.17*
Father CRD (4)				-	-.20*	-.32**	-.46**	-.41**
Mother PPS (5)					-	.51**	.26**	.04
Father PPS (6)						-	.17*	.19*
Mother DAS (7)							-	.38**
Father DAS (8)								-

Note. ** Correlation significant at $p < .01$; * correlation significant at $p < .05$; [†] correlation marginally significant at $p < .10$. ICC = Intra-Class Correlations; CRD = Childrearing Disagreement Scale; PPS = Parenting Practices Scale; DAS = Dyadic Adjustment Scale.

Table 5

Bivariate Correlations between Childrearing Disagreement, Parenting Practices, Marital Adjustment, and Child Behaviors

	Mother CBCL Ext.	Father CBCL Ext.	Mother CBCL Int.	Father CBCL Int.
Mother CRD	.38**	.37**	.22**	.20*
Father CRD	.23**	.37**	.15 [†]	.27**
Mother PPS	-.51**	-.35**	-.35**	-.21**
Father PPS	-.26**	-.38**	-.19*	-.28**
Mother DAS	-.17*	-.10	-.02	.02
Father DAS	-.08	-.10	-.11	-.05

Note. ** Correlation significant at $p < .01$; * correlation significant at $p < .05$; [†] correlation marginally significant at $p < .10$. CRD = Childrearing Disagreement Scale; PPS = Parenting Practices Scale; DAS = Dyadic Adjustment Scale; CBCL Ext. = Child Behavior Checklist Externalizing Scale; CBCL Int. = Child Behavior Checklist Internalizing Scale.

Table 6

Regression Analyses Predicting Child Externalizing Problems from Parenting Effectiveness and Childrearing Disagreement

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Mother Report							
Step 1	Family Income	.13	.40	.02	.03	.34	.74
	Mother DAS	.04	.05	.07	.07	.88	.38
	Mother PDS IM	.06	.15	.03	.03	.38	.70
	Child Gender	-2.13	1.10	-.14	-.16	-1.94	.05
Step 2	Mother PPS	-.23	.05	-.41	-.39	-5.22	<.001
Step 3	Mother CRD	1.75	.68	.22	.20	2.56	.01
Father Report							
Step 1	Family Income	-.75	.36	-.15	-.16	-2.05	.04
	Father DAS	.04	.04	.06	.06	.79	.43
	Father PDS IM	.12	.13	.07	.08	.93	.35
	Child Gender	-.59	1.01	-.04	-.05	-.59	.56
Step 2	Father PPS	-.14	.04	-.28	-.29	-3.71	<.001
Step 3	Father CRD	.18	.05	.29	.27	3.48	<.01

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; CRD = Childrearing Disagreement Scale.

Table 7

Regression Analyses Predicting Child Internalizing Problems from Parenting Effectiveness and Childrearing Disagreement

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Mother Report							
Step 1	Family Income	-.01	.06	-.02	-.02	-.22	.83
	Mother DAS	.01	.01	.17	.15	1.84	.07
	Mother PDS IM	-.01	.06	-.03	-.03	-.41	.68
	Child Gender	-.07	.18	-.03	-.03	-.42	.68
Step 2	Mother PPS	-.02	.01	-.30	-.27	-3.38	<.01
Step 3	Mother CRD	.18	.11	.16	.13	1.63	.11
Father Report							
Step 1	Family Income	-.12	.06	-.16	-.16	-2.00	.05
	Father DAS	.01	.01	.07	.07	.81	.42
	Father PDS IM	.01	.02	.03	.03	.34	.74
	Child Gender	.04	.17	.02	.02	.22	.83
Step 2	Father PPS	-.02	.01	-.21	-.21	-2.65	.01
Step 3	Father CRD	.02	.01	.21	.19	2.32	.02

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; CRD = Childrearing Disagreement Scale.

Table 8

Regression Analyses Predicting Externalizing Problems with Different Parents Reporting on the Predictors and the Child Outcomes

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Fathers' Report of Externalizing Problems							
Step 1	Family Income	-.62	.62	-.12	-.13	-1.65	.10
	Mother DAS	.07	.04	.14	.13	1.61	.11
	Mother PDS IM	.03	.14	.02	.02	.19	.85
	Child Gender	-.55	1.04	-.04	-.04	-.53	.60
Step 2	Mother PPS	-.11	.04	-.22	-.20	-2.55	.01
Step 3	Mother CRD	2.24	.65	.32	.27	3.46	.001
Mothers' Report of Externalizing Problems							
Step 1	Family Income	-.19	.43	-.03	-.04	-.43	.67
	Father DAS	.01	.05	.01	.01	.09	.93
	Father PDS IM	.34	.15	.18	.18	2.27	.03
	Child Gender	-3.34	1.19	-.21	-.22	-2.80	.01
Step 2	Father PPS	-.10	.05	-.18	-.18	-2.29	.02
Step 3	Father CRD	.13	.06	.19	.17	2.15	.03

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; CRD = Childrearing Disagreement Scale.

Table 9

Regression Analyses Predicting Child Internalizing Problems with Different Parents Reporting on the Predictors and the Child Outcomes

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Fathers' Report of Internalizing Problems							
Step 1	Family Income	-.12	.06	-.15	-.14	-1.83	.07
	Mother DAS	.01	.01	.16	.14	1.78	.08
	Mother PDS IM	.00	.02	.01	.01	.13	.90
	Child Gender	.00	.18	.00	.00	-.02	.99
Step 2	Mother PPS	-.01	.01	-.14	-.12	-1.59	.11
Step 3	Mother CRD	.20	.11	.18	.14	1.87	.06
Mothers' Report of Internalizing Problems							
Step 1	Family Income	-.06	.07	-.07	-.07	-.84	.40
	Father DAS	-.01	.01	-.08	-.08	-.89	.37
	Father PDS IM	.02	.02	.06	.06	.75	.46
	Child Gender	-.18	.18	-.08	-.08	-.96	.34
Step 2	Father PPS	-.01	.01	.07	-.13	-1.58	.12
Step 3	Father CRD	.01	.01	-.13	.06	.75	.45

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; CRD = Childrearing Disagreement Scale.

Table 10

Bivariate Correlations between Parental Disagreement in Parenting Behaviors, Parental disagreement in Parenting Goals, and Child Problems

	Mother-Father ICC for Behaviors	Mother-Father ICC for Goals
Mother Report CBCL Externalizing	-.22**	-.02
Father Report CBCL Externalizing	-.23**	-.08
Mother Report CBCL Internalizing	-.15 [†]	.03
Father Report CBCL Internalizing	-.20*	-.09

Note. ** Correlation significant at $p < .01$; * correlation significant at $p < .05$; [†] correlation marginally significant at $p < .10$.

Table 11

Regression Analyses Predicting Child Externalizing Problems from Parenting Effectiveness and Parental Disagreement in Parenting Behaviors

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Mothers' Report							
Step 1	Family Income	-.03	.40	-.01	-.01	-.08	.94
	Mother DAS	-.01	.04	-.02	-.03	-.33	.74
	Mother PDS IM	.06	.15	.03	.03	.41	.68
	Child Gender	-2.20	1.12	-.14	-.16	-1.96	.05
Step 2	Mother PPS	-.26	.05	-.46	-.43	-5.80	<.001
Step 3	Mother-Father ICC Behaviors	-1.97	3.44	-.04	-.05	-.57	.57
Fathers' Report							
Step 1	Family Income	-.93	.37	-.18	-.20	-2.49	.01
	Father DAS	-.03	.04	-.05	-.05	-.60	.55
	Father PDS IM	.02	.13	.01	.02	.18	.86
	Child Gender	-.77	1.04	-.06	-.06	-.74	.46
Step 2	Father PPS	-.16	.04	-.31	-.30	-3.85	<.001
Step 3	Mother-Father ICC Behaviors	-4.40	3.19	-.11	-.11	-1.38	.17

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; ICC = Intra-Class Correlations.

Table 12

Regression Analyses Predicting Child Internalizing Problems from Parenting Effectiveness and Parental Disagreement in Parenting Behaviors

Predictors		B	SE B	β	Partial <i>r</i>	<i>t</i>	<i>p</i>
Mothers' Report							
Step 1	Family Income	-.03	.06	-.04	-.04	-.48	.63
	Mother DAS	.01	.01	.10	.10	1.26	.21
	Mother PDS IM	-.01	.02	-.03	-.03	-.38	.71
	Child Gender	-.08	.18	-.04	-.04	-.45	.66
Step 2	Mother PPS	-.03	.01	-.33	-.29	-3.74	<.001
Step 3	Mother-Father ICC Behaviors	-.32	.55	-.05	-.05	-.58	.56
Fathers' Report							
Step 1	Family Income	-.14	.06	-.18	-.18	-2.30	.02
	Father DAS	-.001	.01	-.01	-.01	-.14	.89
	Father PDS IM	-.003	.02	-.01	-.01	-.16	.87
	Child Gender	.02	.17	.01	.01	.13	.90
Step 2	Father PPS	-.02	.01	-.22	-.21	-2.65	.01
Step 3	Mother-Father ICC Behaviors	-.73	.52	-.11	-.11	-1.40	.16

Note. DAS = Dyadic Adjustment Scale; PDS IM = Paulhus Deception Scales – Impression Management Scale; PPS = Parenting Practices Scale; ICC = Intra-Class Correlations.

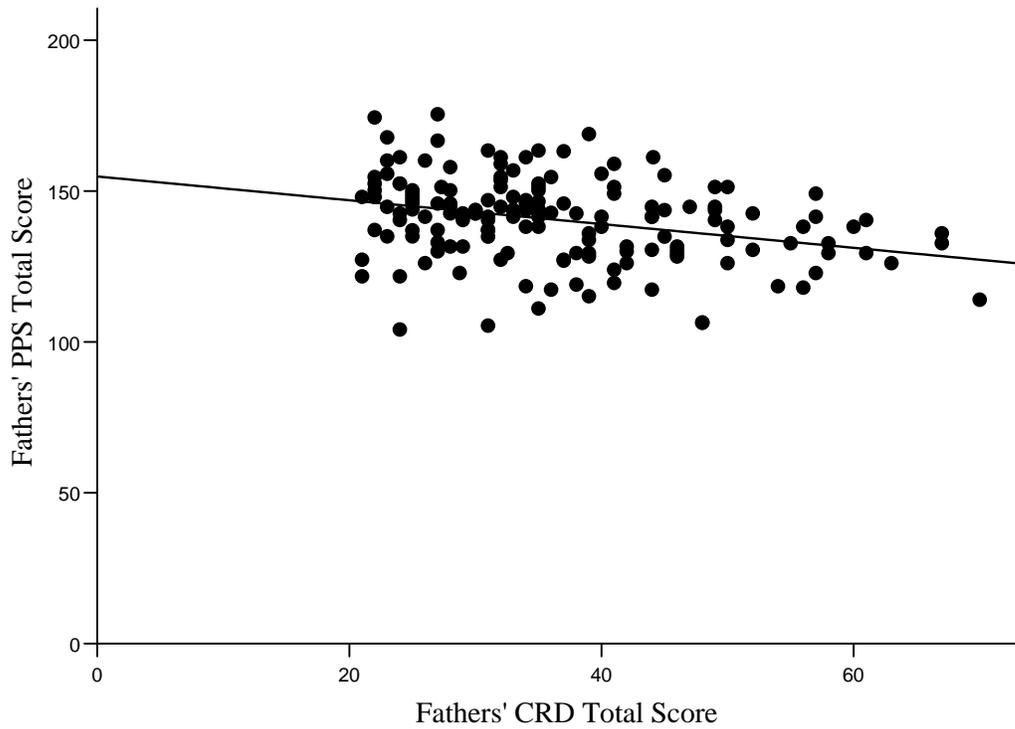
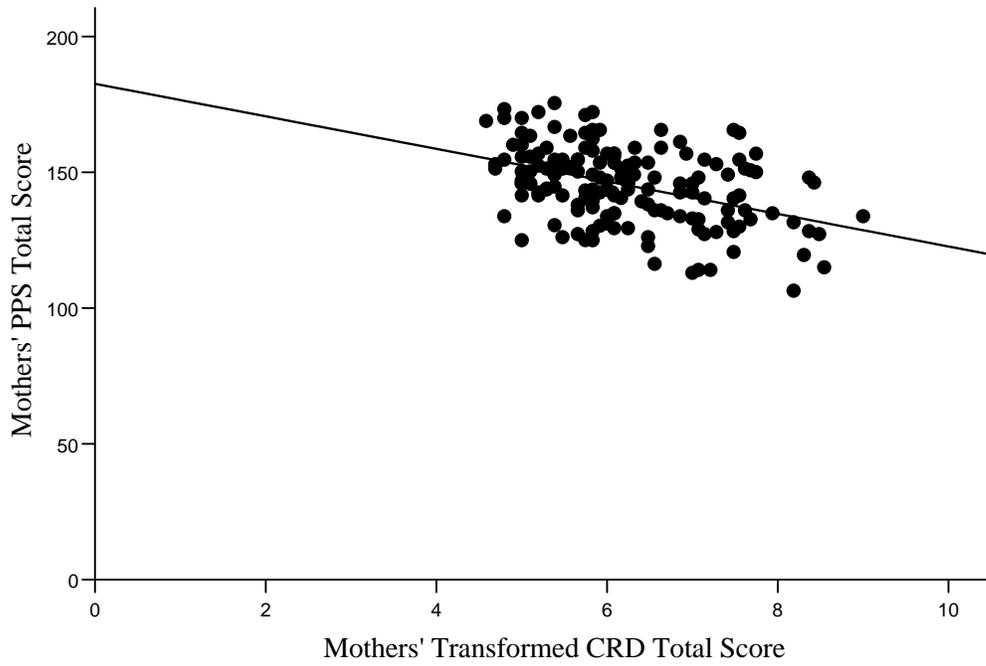


Figure 3. Relationships between parents' scores on the Childrearing Disagreement Scale (CRD) and the Parent Practices Scale (PPS).

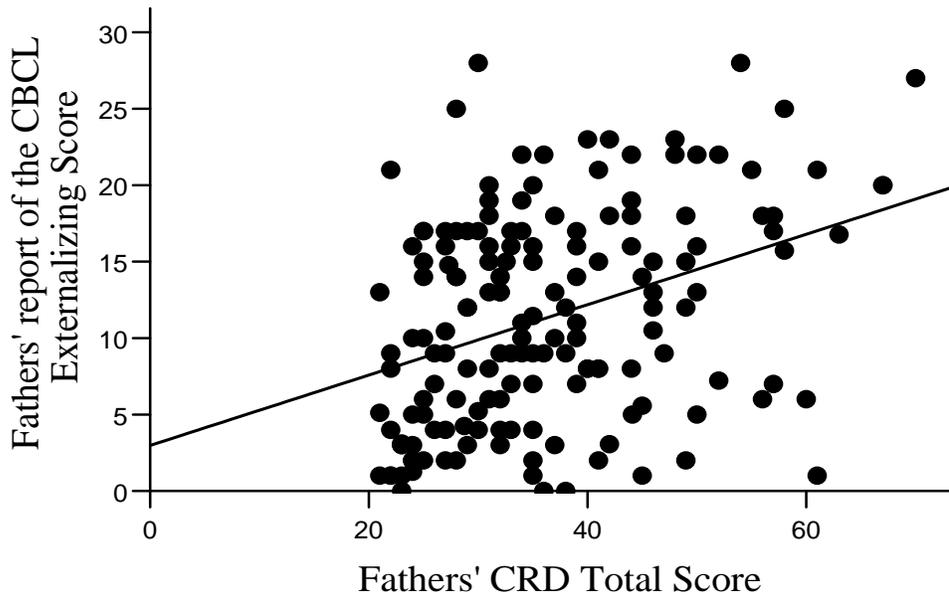
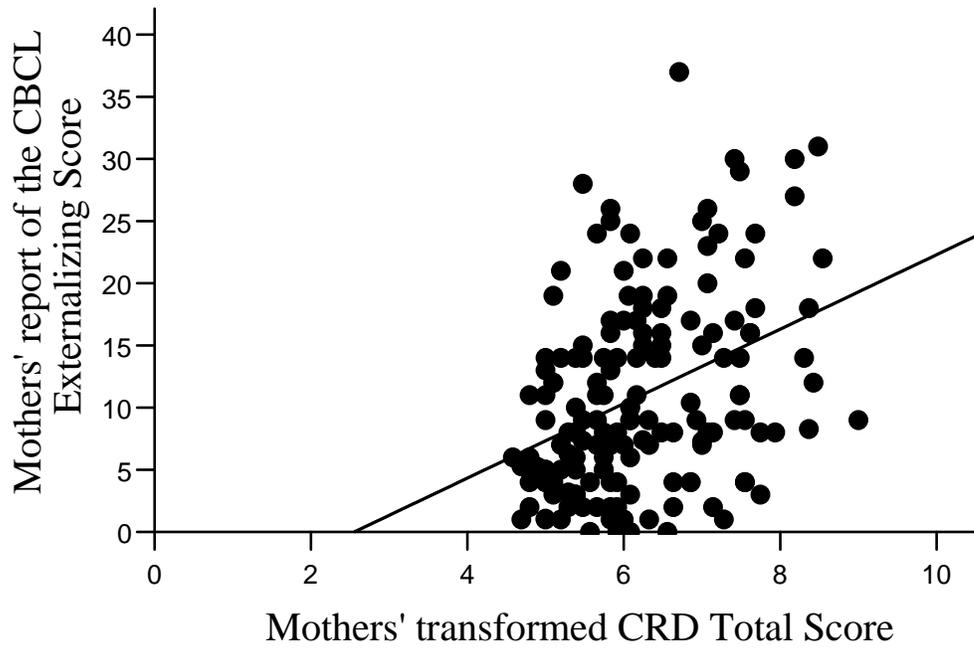


Figure 4. Relationships between parents' scores on the Childrearing Disagreement Scale (CRD) and children's Externalizing scores on the Child Behavior Checklist (CBCL).

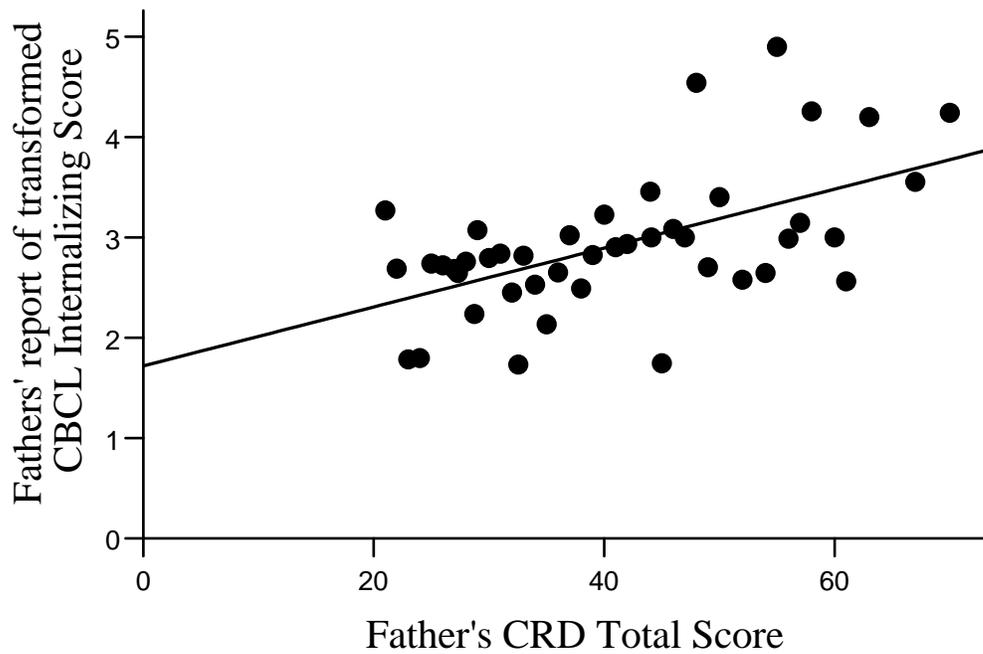
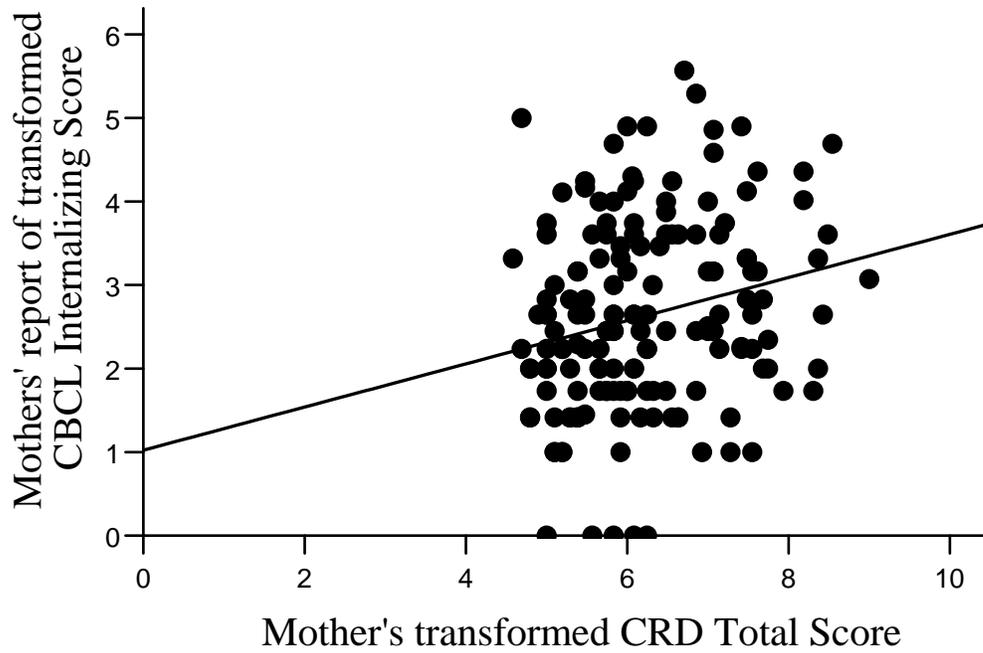


Figure 5. Relationships between parents' scores on the Childrearing Disagreement Scale (CRD) and children's Internalizing scores on the Child Behavior Checklist (CBCL).

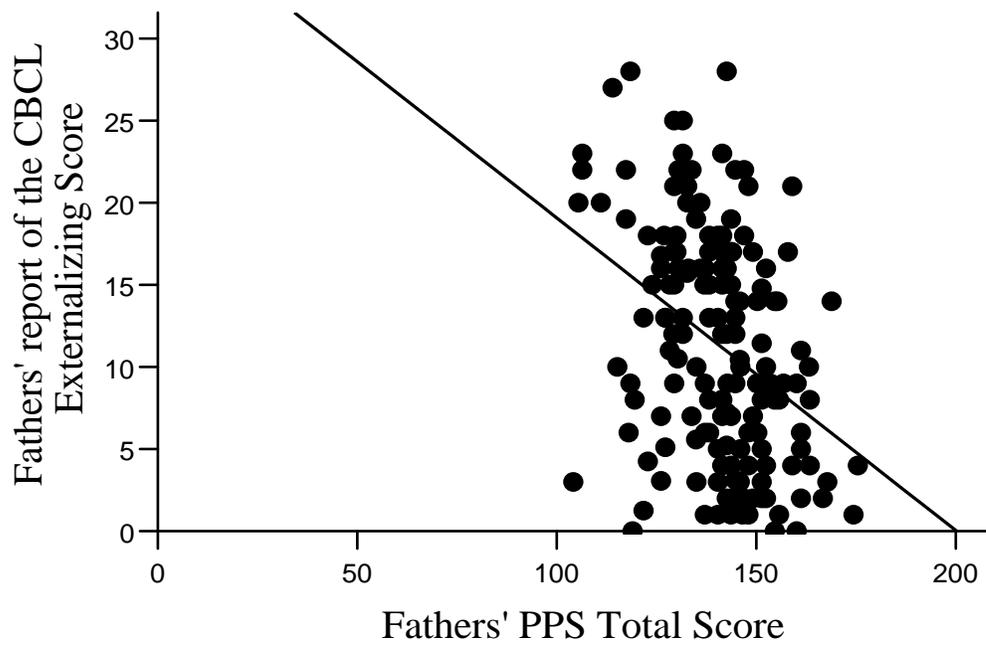
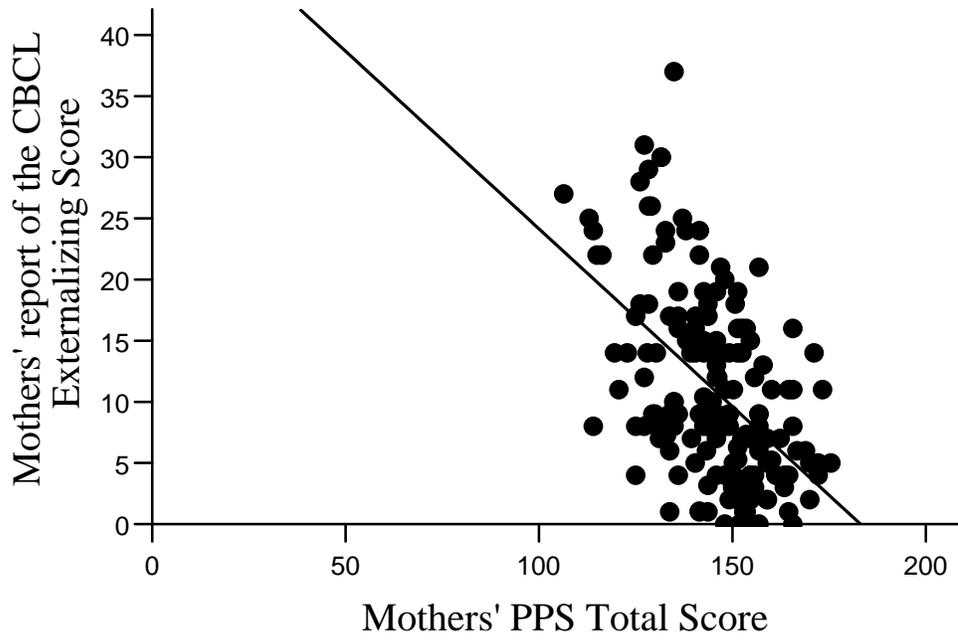


Figure 6. Relationships between parents' scores on the Parenting Practices Scale (PPS) and children's Externalizing scores on the Child Behavior Checklist (CBCL).

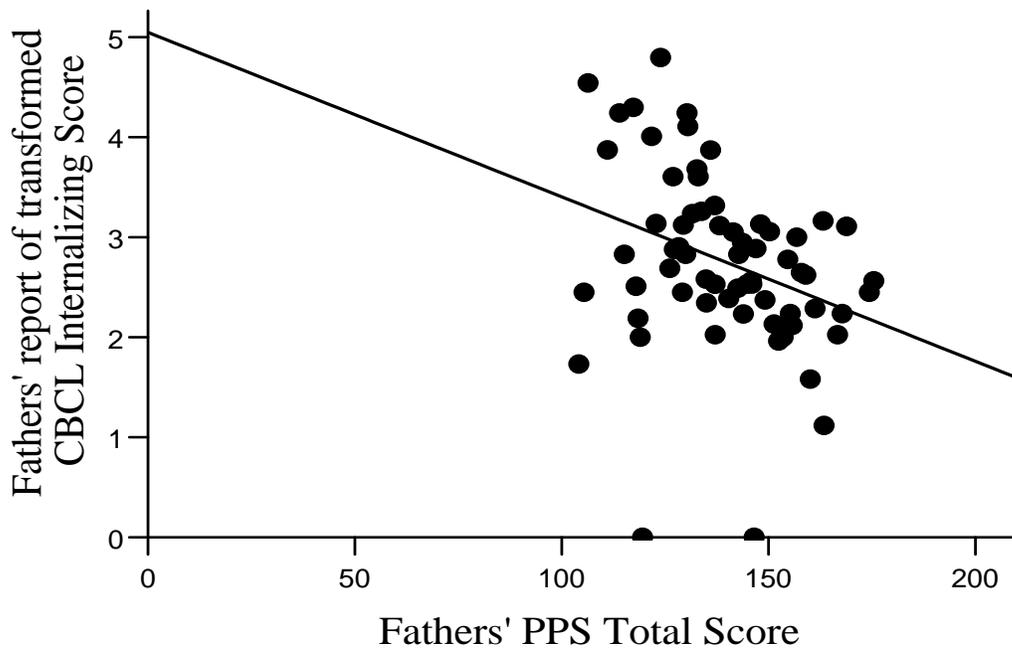
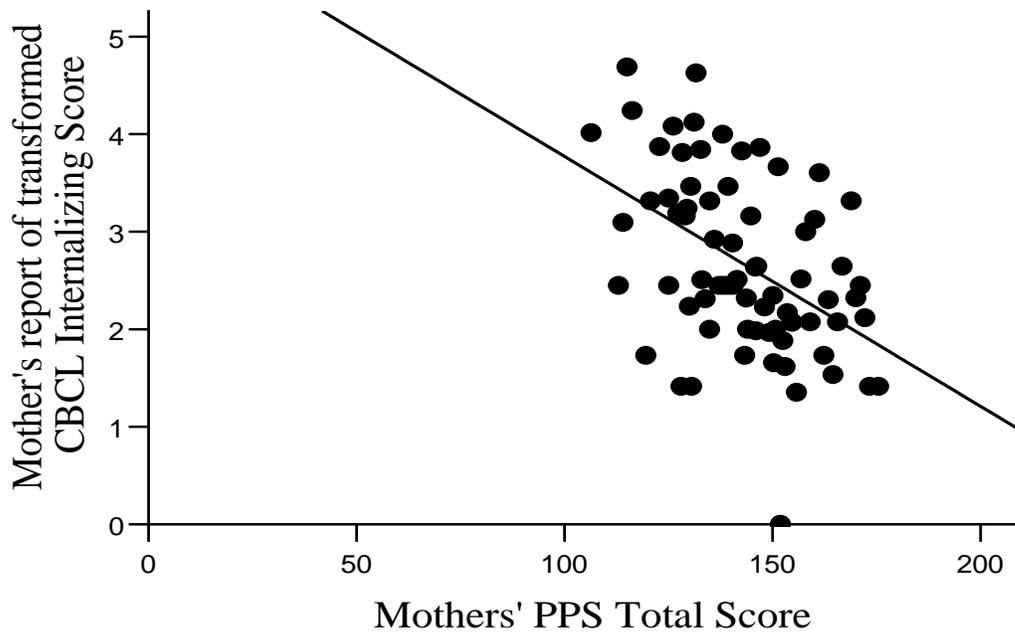


Figure 7. Relationships between parents' scores on the Parent Practices Scale (PPS) and children's Internalizing scores on the Child Behavior Checklist (CBCL).

Appendices

Appendix A: Child-Rearing Disagreement Scale (CRD)

Couples with children find many different topics on which to disagree. Please indicate how often, during the last 6 months, you and your spouse have had irritating disagreements in the areas listed below. Please remember to think about the target child as you complete this measure.

During the last 6 months, my spouse has irritated me by: (circle one score)

	Never	Now & then	Almost every week 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 close enough eye on our child's whereabouts	1	2	3	4	5	6
9. Being too slow about seeing a doctor for our child's colds, injuries, etc.	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 behavior 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 more 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 (i.e., more comments than help)	1	2	3	4	5	6
17. Letting some bit of misbehavior go on and on until I finally do something about it myself	1	2	3	4	5	6
18. Being hard-headed about certain aspects of child-rearing	1	2	3	4	5	6
19. Implying that some of our child's misbehavior is partly my fault	1	2	3	4	5	6
20. Not sticking to agreements we made about child care or 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 B: Parenting Practices Scale (PPS)

The following questions have to do with things that your child does and ways that you react to your child. Please circle the number that best represents your choice for each question.

1- How often does this child do something that gives you pleasure and enjoyment?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

2- How often does this child do something that greatly irritates you and gets on your nerves?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

3- How often do you read to your child?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

4- How often do you physically punish your child, for example by a spanking?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

5- How often do you praise your child, by saying something like "Good for you!", "What a nice thing you did!", "Thank you!" or "That's good going!"?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

6- How often do you tell your child about your own experience, by saying something like, "I saw a pretty bird outside just a little while ago," or "I exercised so hard that I got really tired," or "I was able to give some directions today to somebody that got lost," or "I really like the way the sky looks now"?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

7- How often do you and your child talk or play with each other, focusing attention on each other for five minutes or more, without your asking or telling the child to do anything?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

8- How often do you tell your child to do something, with an irritated or angry tone of voice?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

9- How often do you and your child engage in make-believe play, where you each play the part of a character, and together make up a story to act out with each other?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

10- How often do you and your child laugh together?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

11- How often do you yell or speak in a very loud voice to your child, with irritated or angry emotion?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

12- What fraction of days does your child get three meals, one in the morning, one around noon, and one in the evening?

0. Never
1. Some, but less than a quarter of the time
2. Between a quarter and half the time
3. Between half and three quarters of the time
4. Not all the time, but more than three quarters of the time
5. All the time

13- What fraction of days does your child get a bath or shower at one particular time, known as his or her bath-time?

0. Never
1. Some, but less than a quarter of the days
2. Between a quarter and half the days
3. Between half and three quarters of the days
4. Not all the days, but more than three quarters of the days
5. All the days

14- What fraction of the time does your child go to bed at one particular time, known as his or her bedtime?

0. There is no regular or official bedtime
1. There is an official bedtime, never kept
2. There is an official bedtime, kept some, but less than a quarter of the time
3. Official bedtime kept between a quarter and half the time
4. Official bedtime kept between half and three quarters of the time
5. Official bedtime kept not all the time, but more than three quarters of the time
6. Official bedtime kept all the time

15- What fraction of days does your child eat all of the following: some meat (or other high protein food), some fruits or vegetables, some milk products, and some bread or grain products?

0. Never
1. Some, but less than a quarter of the days
2. Between a quarter and half the days
3. Between half and three quarters of the days
4. Not all the days, but more than three quarters of the days
5. All the days

16- When you and your child set out to do something fun together, what fraction of the time does it actually turn out to be fun?

0. Never
1. Some, but less than a quarter of the time
2. Between a quarter and half the time
3. Between half and three quarters of the time
4. Not all the time, but more than three quarters of the time
5. All the time

17- What fraction of days are you too worn out and exhausted to do something fun with your child?

0. Never
1. Some, but less than a quarter of the days
2. Between a quarter and half the days
3. Between half and three quarters of the days
4. Not all the days, but more than three quarters of the days
5. All the days

18- How often does the thought go through your mind that you wish you didn't have to spend so much time with this child?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

19- Think of all the times that you comment to the child about the child's behavior. What fraction are congratulation or approval?

0. No approval
1. Less than a quarter of the comments are approval
2. Between a quarter and a half are approval
3. Between half and three quarters are approval
4. Not all, but greater than three quarters are approval
5. All are approval

20- Think of all the times that you comment to the child about the child's behavior. What percentage is correction or disapproval?

0. No disapproval or correction
1. Less than a quarter of the comments are disapproval
2. Between a quarter and a half are disapproval
3. Between half and three quarters are disapproval
4. Not all, but greater than three quarters are disapproval
5. All are disapproval or correction

21- Suppose your child was handling an object that you definitely did not want the child to handle. Suppose you told the child to put the object down, and he or she defiantly said "No!" Of the following options, which do you think would be the most appropriate response, most of the time?

0. Send the child to a room for half an hour or more
1. Yell at the child
2. Repeat the request until the child obeyed
3. Ignore the child
4. Send the child to a room for two to five minutes
5. Show some disapproval in your voice and in your face, and physically get the object from the child, and from then on, if possible, keep the object in a place the child couldn't reach

22- Do you keep your child from seeing television shows and movies that have a lot of violence or meanness in them?

0. I don't try to do this.
1. I try to do this, but I don't succeed at all.
2. I try to do this, but I only succeed a little bit.
3. I try to do this, and I succeed fairly well.
4. I try to do this, and the child sees almost no violence on television.

23- How often does your child see adults or teenagers in your house physically fighting with or hitting or otherwise trying to hurt each other?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

24- When you give the child a command or order to do something, what fraction of the time do you make sure that the child does it?

0. Never
1. Some, but less than a quarter of the time
2. Between a quarter and half the time
3. Between half and three quarters of the time
4. Not all the time, but more than three quarters of the time

25- Have you arranged the objects in your house so that those things you don't want the child to mess with are not within his reach, so that you don't have to command him to stay out of them?

0. Many things are in reach that the child should leave alone.
1. A good number of things are in reach that the child should leave alone.
2. A few things are in reach that the child should leave alone.
3. Almost no things are in reach that the child should leave alone.
4. No things are in reach that the child should leave alone.
5. All the time

26- How often is your child able to get his or her way by having a tantrum?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

27- How often do you tell your child you may leave him or her if he or she doesn't behave better?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

28- How often do you punish your child for crying?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

29- How often do you punish your child for wetting himself or herself?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

30- How often do you or does someone else tell the child that he is bad or that he is not as good as someone else?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

31- How often does the child see an adult in the house raise his voice in anger at some other adult in the house?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

32- How often does the child see an adult in the house do something kind, friendly, or very much appreciated by another adult in the house?

0. Never
1. Less than once a week
2. About once a week
3. About three or four times a week
4. About once a day
5. Several times each day
6. Many times each day

33- When your child asks you a question, what fraction of the time do you feel like answering it in an enthusiastic and interested way, rather than feeling irritated that your child is bothering you?

0. Never feel like answering enthusiastically
1. Feel like answering enthusiastically some, but less than a quarter of the time
2. Between a quarter and half the time
3. Between half and three quarters of the time
4. Not all the time, but more than three quarters of the time
5. Feel like answering enthusiastically all the time

34- What do you think would be the best thing to do, of the following options, if your child spilled his or her milk?

0. Clean up the milk without criticizing the child
1. Get the child to clean up the milk and scold him or her
2. Send the child to a room for two to five minutes
3. Yell at the child not to be so clumsy
4. Send the child to a room for thirty minutes

Appendix C: Dyadic Adjustment Scale (DAS)

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances						
2. Matters of recreation						
3. Religious matters						
4. Demonstrations of affection						
5. Friends						
6. Sex relations						
7. Conventionality (correct or proper behavior)						
8. Philosophy of life						
9. Ways of dealing with parents or in-laws						
10. Aims, goals, and things believed important						
11. Amount of time spent together						
12. Making major decisions						
13. Household tasks						
14. Leisure time interests and activities						
15. Career decisions						

	All the Time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?						
17. How often do you or your mate leave the house after a fight?						
18. In general, how often do you think that things between you and your partner are going well?						
19. Do you confide in your mate?						
20. Do you ever regret that you married? (or lived together)						
21. How often do you and your partner quarrel?						
22. How often do you and your mate "get on each other's nerves?"						
	Every Day	Almost Every Day	Occasionally	Rarely	Never	
23. Do you kiss your mate?						
	All of them	Most of them	Some of them	Very few of them	Never	
24. Do you and your mate engage in outside interests together?						

How often would you say the following events occur between you and your mate?						
	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange of ideas						
26. Laugh together						
27. Calmly discuss something						
28. Work together on a project						
These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (Check Yes or No)						
	YES			NO		
29. Being too tired for sex						
30. Not showing love						
31. 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 Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
32. Which of the following statement best describes how you feel about the future of your relationship? (Check one from the six statements)						
a. I want desperately for my relationship to succeed, and would go to almost any length to see that it does.						
b. I want very much for my relationship to succeed, and will do all I can to see that it does.						

c. I want very much for my relationship to succeed, and will do my fair share to see that it does.	
d. It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.	
e. It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.	
f. My relationship can never succeed, and there is no more tha I can do to keep the relationship going.	

Appendix D: Parenting Behaviors and Goals Questionnaire (PBGQ)

Instructions:

- This questionnaire contains five vignettes describing common child misbehaviors.
- As you read each vignette, please imagine that it is describing you and your child.
- After each vignette, please take a moment first to think about how you would respond to your child.
- Then, use the rating scales to indicate:
 - 1) how likely you are to engage in each one of the 13 behaviors listed; and
 - 2) how important each one of the 6 outcomes is for you in that situation.
- When making your ratings, please try to make use of the entire range of the scale (i.e., from 1 to 7).

Scenario #1

It is fifteen minutes past your child's bedtime and you see your child watching TV in the living room. You tell him/her to get ready for bed, but five minutes later, you see that he/she is still watching TV. You go in again and explain to your child that it is time for him/her to go to bed, but he/she refuses and insists on watching TV.

Scenario #2

One afternoon, you go to pick up your child from the day care center or babysitter. When you get there, your child is in the yard with some other children. As you are getting out of the car you are watching the children playing. One of the other children has a toy that your child wants, and you see your child grab the toy and push the other child down. The day care supervisor has not seen this behavior.

Scenario #3

You and your child are in the local grocery store. Your child asks for a very sugary cereal. You tell him/her it's not very good for him/her. Then, your child sees some stuffed animals and says he/she wants one. You tell him/her that he/she has toys at home, and you can't buy another one today. Then, your child grabs a candy bar, and when you try to put it on the shelf, your child starts to scream and cry.

Scenario #4

You and your child are at home and you are expecting some friends to drop by soon. You look in the front room of your home, and your child's toys are all over the floor. Your child is watching TV. You ask your child to help you clean up the toys, and your child does not move. You ask your child to pick his/her toys up now, and your child says, "NO!"

Scenario #5

It's dinner time, and you have prepared your child's favorite meal. You ask your child to sit and eat at the dinner table, but he/she keeps getting up and walking away. You ask him/her to come back and stay seated, but he/she does not listen and starts to play with his/her toys.

In this situation, how likely are you to:

	Would definitely not do				Would definitely do		
Show disapproval	1	2	3	4	5	6	7
Make my child feel guilty	1	2	3	4	5	6	7
Remove affection from my child	1	2	3	4	5	6	7
Remove privilege from my child	1	2	3	4	5	6	7
Isolate my child from others	1	2	3	4	5	6	7
Tell my child the rule that he/she is supposed to follow	1	2	3	4	5	6	7
Give up or avoid situation	1	2	3	4	5	6	7
Explain the natural consequences of my child's behavior	1	2	3	4	5	6	7
Point out the impact of my child's behavior on other people's feelings	1	2	3	4	5	6	7
Demonstrate the appropriate behavior to my child	1	2	3	4	5	6	7
Compromise, negotiate, or cooperate with my child	1	2	3	4	5	6	7
Show love or comfort my child	1	2	3	4	5	6	7
Distract my child's attention to another activity	1	2	3	4	5	6	7

In this situation, how important is each of the following goals for you?

	Not at all						Very
	important						important
Get my child to behave properly right away.	1	2	3	4	5	6	7
Reduce my own anxiety.	1	2	3	4	5	6	7
Make my child happier.	1	2	3	4	5	6	7
Help my child get along better in life and enhance my child's well being.	1	2	3	4	5	6	7
Maintain a loving and trusting relationship with my child.	1	2	3	4	5	6	7
Teach my child how the two of us can problem-solve together.	1	2	3	4	5	6	7

Appendix E: UBC Research Ethics Board's Certificates of Approval



The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR: Charlotte Johnston	INSTITUTION / DEPARTMENT: UBC/Arts/Psychology, Department of	UBC BREB NUMBER: H07-02700
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
Institution UBC		Site Vancouver (excludes UBC Hospital)
Other locations where the research will be conducted: The study will be conducted over the Internet (via computer which is in participants' homes or other access points).		
CO-INVESTIGATOR(S): N/A		
SPONSORING AGENCIES: Canadian Institutes of Health Research (CIHR)		
PROJECT TITLE: Parenting cognitions and behaviors of mothers and fathers of preschool children.		

CERTIFICATE EXPIRY DATE: November 30, 2008

DOCUMENTS INCLUDED IN THIS APPROVAL:	DATE APPROVED: November 30, 2007	
Document Name	Version	Date
Consent Forms:		
Consent Form	N/A	November 1, 2007
Advertisements:		
Poster for Community Centres	N/A	November 1, 2007
Ad for Community Newspapers	N/A	November 1, 2007
Questionnaire, Questionnaire Cover Letter, Tests:		
PDS Impression Management	N/A	November 1, 2007
Child Behavior Checklist 1.5-5	N/A	November 1, 2007
General Family Information	N/A	November 1, 2007
Childrearing Disagreement Scale	N/A	November 1, 2007
Dyadic Adjustment Scale	N/A	November 1, 2007
Parenting Practices Scale	N/A	November 1, 2007
Parenting Goals and Behaviors Questionnaire	N/A	November 1, 2007
Other:		
This study uses an internet survey to gather data. The website is currently under construction. The final website will consist of only the cover letter/consent form, and the 7 questionnaires (all of which are attached to this application).		
The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.		
<p>Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:</p> <hr/> <p>Dr. M. Judith Lynam, Chair Dr. Jim Rupert, Associate Chair Dr. Laurie Ford, Associate Chair</p>		