PREDICTORS OF UNDERMINING COPARENTING

BY

DANIEL JAMES LAXMAN

THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts in Psychology
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2010

Urbana, Illinois

Adviser:

Professor Sarah C. Mangelsdorf

Abstract

This investigation explored how parent personality, division of labor, maternal gatekeeping, and child temperament predicted undermining coparenting. Parent characteristics were assessed during the third trimester of pregnancy. Parent and child characteristics were assessed at 3 months and at 1 year. Undermining coparenting was observed at 3 years. Couples in which fathers were higher on negative affect *or* higher on positive affect displayed more undermining coparenting. Families showed greater undermining coparenting if they divided household and child care tasks unevenly and perceived their child as difficult. Mothers' encouragement of father involvement was associated with less undermining coparenting if parents perceived their child as difficult. There was a significant interaction between fathers' depressive symptoms and child difficult temperament; couples who perceived their child as more difficult and in which fathers reported experiencing more depressive symptoms later exhibited higher levels of undermining coparenting. In general, child difficult temperament was not directly related to undermining coparenting, but moderated the association between other predictors and undermining coparenting. This study points to the need for further research into the role parents' and children's characteristic play in influencing coparenting quality.

To Kristie, My Love

Acknowledgements

This study would not have been possible without the support of many people. First of all, I would like to thank my adviser, Sarah C. Mangelsdorf, for giving me support, advice, guidance, and insight throughout the entire process. I also want to thank my second reader, Brent McBride, for his time and helpful comments.

Second, I would like to give many thanks to my fellow lab members, Aya Shigeto, Maria Wong, Allison Jessee, and Geoffrey Brown. If it had not been for their support and collaboration, this study would not be possible. Special thanks also to Stevie Schein and Kathy Anderson for keeping the lab under control and Cindy Neff for her insightful discussions and comments. I also wish to thank our many undergraduate research assistants for their huge contributions to this study, especially Whitney Rossmiller Giesing, who constantly went above and beyond. A special thanks to the families who participated in this study for giving us invaluable opportunities to study family functioning.

Last but not least, I really appreciate my wife, Kristie Love Laxman, for her constant support and sweet encouragement and my parents, family, and friends who endured this long process with me, always offering support and love.

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Introduction

Historically, researchers studying the effects of parenting have focused on the mother-child dyad. Beginning in the 1970s and 1980s, increasing attention has been give to the role of fathers. In more recent years, however, researchers have moved beyond examining the parent-child dyad to examination of the family system. One example of this is the consideration of the impact of *coparenting* quality on family and child well-being. Talbot and McHale (2004) defined coparenting as an "enterprise undertaken by two or more adults working together to raise a child for whom they share responsibility" (p. 192).

Coparenting is thought to be distinct from but related to marital quality (Mangelsdorf, Laxman, & Jesse, in press). While the marital dyad and the coparenting dyad both include the mother and the father, the coparenting dyad considers the relationship between the two always in reference to or in the presence of the child. For example, if one is assessing marital quality, one might inquire how frequently parents disagree or argue. On the other hand, if one is assessing coparenting quality, one might also consider how frequently parents disagree or argue, but only inasmuch as those disagreements are related to or involve the child. One would expect, and research has demonstrated, that parents who have a better marital relationship also have better coparenting experiences, engaging in less undermining and more supportive coparenting (see Mangelsdorf, Laxman, & Jesse, in press, for a review). However, coparenting is still distinct from marital quality. As Van Egeren and Hawkins (2004) succinctly put it, "Coparenting requires a child" (p. 167).

Coparenting research is also distinct from work such as that done by Davies and Cummings (1994) in relation to the impact of martial conflict on children's emotional security in the interparental subsystem. While Davies and Cumming might consider marital conflict in the

presence of the child, coparenting researchers examine conflict between parents as they interact with or discipline the child or otherwise care for him or her. The distinction is that coparenting researchers, in addressing interparental conflict, focus on conflict that occurs in regard to the parenting roles and their enactment. For example, in assessing coparenting quality, researchers might consider one parent's efforts to undermine and override another parent's disciplinary practices or consider how one parent competes with another parent to direct or otherwise engage their child. While we would expect both marital conflict and undermining coparenting to negatively impact children's well-being, the two are conceptually distinct.

It should be noted that the unit of analysis in coparenting research can be the parenting couple or differences between mothers' and fathers' behaviors or feelings (Van Egeren and Hawkins, 2004). An example of the former would be observing how parents as a couple support or undermine one another's efforts to play with or discipline their child. An example of the latter would be to ask each parent to report how supportive they are of their partners' disciplinary practices and decisions. In the present study, the unit of analysis is the parents as a couple, although we will review findings from studies that conceptualize coparenting both ways. Having defined and conceptualized coparenting, we now turn our attention to the impact of coparenting on children's well-being.

The Impact of Coparenting on Children's Outcomes

Multiple studies have documented the impact of coparenting quality on children's outcomes across childhood and adolescence. For example, hostile-competitive coparenting during infancy has been linked to greater aggression in children (McHale & Rasmussen, 1998) and a less secure parent-child attachment (Caldera & Lindsey, 2006; Frosch, Mangelsdorf, & McHale, 2000). Undermining coparenting when children were 3-years-old predicted more

externalizing behavior problems 1 year later (Schoppe, Mangelsdorf, & Frosch, 2001). When children were 5 years of age, hostile-withdrawn coparenting predicted lower levels of positive peer conversation and higher levels of peer conflict four years later (Leary & Katz, 2004). Although researchers have most frequently studied associations between undermining coparenting and children's outcomes, supportive coparenting has also been linked with children's well-being (for a review, see Mangelsdorf et al., in press).

Predictor and Covariates of Coparenting Quality

As the impact of coparenting quality on children's outcomes has been identified and replicated, the field has made an increasing effort to ascertain what characteristics of parents, children, and the marital relationship are related to coparenting quality. However, results are generally mixed and further research and replication is warranted. The present study addresses this gap in the literature by exploring predictors of undermining coparenting. In addressing predictors of coparenting, we discuss the association between coparenting and demographics, parents' psychological well-being and personality, division of labor, and maternal gatekeeping behavior. Finally, we review how coparenting is related to children's temperament and gender.

Demographics

Family researchers have often examined and controlled for demographic influences on variables of interest and coparenting research is no exception. Despite being frequently examined, few finding have emerged. Those findings that have emerged relate to parents' socioeconomic status and birth-order/presence of other children.

Socioeconomic Status

Parents' education level has been found to be related to better coparenting experiences (Stright and Bales, 2003; Van Egeren, 2003). Relatedly, Belsky, Crnic, & Gable (1995) found

an interesting albeit marginally significant association in a sample of families with first-born, 15-month-old sons: difference in spouses' education was related to supportive coparenting, such that parents who had a greater difference showed less supportive coparenting. Employment status of couples has also been linked to coparenting quality. Lindsey, Caldera, and Colwell (2005) found that both mothers and fathers displayed greater supportive coparenting when both parents are employed. One potential explanation is that dual-earner families are required to coparent in more supportive ways because they are more stretched in balancing work and family responsibilities. However, given that this sample was highly educated, this association and interpretation may not apply to other couples who have different work experiences and resources. Another explanation is that dual-career families may have greater income and resources and consequently may experience less stress. Van Egeren (2003), using a more general measure of socioeconomic status, reported that fathers who had a higher socioeconomic status reported more positive coparenting experiences (Van Egeren, 2003). In sum, it appears that higher socio-economic status is associated with more harmonious coparenting interactions, although the exact mechanisms are unknown. However, the finding that parenting quality is associated with socio-economic status is not new (e.g., Parke & Buriel, 2006). This association may be partially explained by the higher levels of stress experienced by families of lower socio-economic status (McLoyd, 1990).

Number of Children

The findings regarding the impact of the number of children in a family on coparenting quality is quite sparse. Lindsey et al. (2005) found that mothers from dual income families with more than one child were less intrusive than mothers with only one child. However, other studies have failed to find an effect of birth order/presence of another child (e.g., McHale,

Kuersten-Hogan, Lauretti, & Rasmussen, 2000). Future research should explore this issue further.

Parents' Age

Some researchers have explored whether parents' age is a significant correlate of coparenting quality. However, findings have been mixed. For example, Van Egeren (2003) noted that in couples in which the father was older, mothers reported more positive coparenting experiences. However, Gable, Belsky, and Crnic (1995) found that fathers who were younger supported their partner in parenting more frequently than older fathers. In a study of parents and their approximately one-year old child, Lindsey et al. (2005) found that mothers displayed more intrusive coparenting when parents are younger. Further investigation of the association between parents' age and coparenting is warranted.

Parent Psychological Well-being and Personality

In Belsky's (1984) model of the "determinants" of parenting he identified parental personality and psychological well-being as more important than contextual support and child characteristics. Consequently, multiple studies examining the correlates and covariates of coparenting have examined how parents' personality and well-being are related to coparenting quality.

Parent Psychological Well-being

In examining the relations between psychological well-being and coparenting, McHale (1995) found that mothers who had a stronger sense of feeling cared for and loved by others were in couples that had less of a discrepancy between the warmth and involvement she directed at the child compared to the warmth and involvement her husband directed at the child during triadic play. This was also true of fathers. Furthermore, couples in which the mother recalled

being accepted by her mother as a child showed less discrepancy in the warmth and involvement each parent displayed towards their child. In a similar vein, Lindsey et al. (2005) found that mothers who have higher levels of self-esteem displayed greater supportive coparenting while fathers who have higher levels of self-esteem displayed less coparenting intrusiveness. These findings suggest that parents who are better adjusted have better coparenting experiences.

In contrast to the more positive coparenting experiences of better adjusted parents, parents who are less well-adjusted and show more depressive symptoms tend to have more negative coparenting relationships. For example, men who showed an increase in depressive symptoms from before the child was born were more likely to be withdrawn during a discussion of the division of childcare responsibilities at 3 months (Elliston, McHale, Talbot, Parmley, and Kuersten-Hogan, 2008). Finally, fathers who had higher levels of depressive symptoms when the child was 9 months of age reported greater conflict over the child with their spouse, less daily discussion of the child, and less support from their spouse about a year later (Bronte-Tinkew, Scott, Horowitz, and Lilja, 2009). In the present study, we expect better adjusted parents (i.e. parents with less depressive symptoms) to display less undermining coparenting while parents with more depressive symptoms exhibit more undermining coparenting.

Parent Personality

In the examination of main effects of parental personality characteristics on coparenting few consistent findings emerge. This may be due largely to the fact that the different investigations have each used different personality measures and examined different dimensions of personality. For example Van Egeren (2003) found that fathers reported better coparenting experiences when mothers had prenatally reported greater ego development. Similarly, Elliston and colleagues (2008) studied couples prenatally and again with their children at 3 months. They

found that men who prenatally reported having greater ego resilience were less likely to withdraw during a discussion of the division of childcare responsibilities at 3 months. Their partner was also less likely to withdraw. Also, when men reported greater ego resilience, both men and women reported they felt more respect as a parent from their partner. When women had greater ego resilience, women, but not men, reported feeling greater respect.

Talbot and McHale (2004) in their examination of the association between personality and coparenting in parents of one-year-olds found that maternal self-control and paternal flexibility predicted coparenting harmony even after controlling for marital quality. In studying families of toddlers, Kolak and Volling (2007) found that maternal and paternal positive expressiveness was related to coparenting cooperation, while maternal negative expressiveness was negatively related. Fathers who were higher on paternal expressiveness showed less triangulation while mothers and fathers who were higher on negative expressiveness showed more coparenting conflict. Stright and Bales (2003), in a sample of parents and their preschool child, found that mothers who were less positively adjusted in their personality (had a lower average of extroversion, openness to experiences, agreeableness, conscientiousness, and higher levels of neuroticism) showed more undermining coparenting concurrently whereas those were more positively adjusted reported that their partners were more supportive.

Differences between parents' personality has also been linked to coparenting quality For example, Belsky, Crnic, and Gable (1995) found that larger differences between parents in terms of extroversion and interpersonal affect were related to higher levels of unsupportive coparenting, but found no associations with differences in neuroticism. Furthermore, in studying families of toddlers, Kolak and Volling (2007) found interactions involving parental expressiveness. Specifically, when fathers were low on positive expressiveness, coparenting

triangulation increased as marital quality decreased. The same was not found for fathers high on positive expressiveness. When mothers and fathers were both high or both low on positive expressiveness, they showed more coparenting conflict. However, when one was high and the other was low, coparenting conflict was reduced. The authors suggest that for couples in which one partner is high on positive expressiveness and the other is low, the more expressive partner complements or compensates for the less expressive partner, thus enabling positive coparenting interactions. In contrast, couples in which both are low on positive expressiveness may not share as much love, concern, and appreciation which can lead to more coparenting conflict. The authors note that it is unclear why couples in which both are high on positive expressiveness would show more undermining coparenting. However, they suggest that these couples may be more engaged with one another, including in their parenting, and consequently experience a greater frequency of conflict over children. Thus differences in parenting personality characteristics may lead to unsupportive coparenting, but for different reasons.

A number of interactions between personality and marriage have been identified as predictors of coparenting quality. For example, Talbot and McHale (2004) identified interactions involving parental flexibility and self-control. Specifically, when fathers were less flexible, coparenting negativity increased as marital quality decreased. This association was not present for fathers who were more flexible. When mothers were high in flexibility, coparenting harmony was greater when martial quality was higher. This association was not found for mothers low in flexibility. Finally, for mothers who were high in self-control, coparenting harmony increased as marital quality increased. This association was not found for mothers who were low in self-control.

Research on the association between parent personality and coparenting quality has yielded somewhat mixed results. However, it appears that higher levels of self-control, flexibility, positive expressiveness and lower levels of negative expressiveness are related to better coparenting experiences. Given the mixed nature of this area of research, the present study was somewhat exploratory in assessing the association between parents personality and undermining coparenting. However, we made specific hypotheses based on the three personality factors used in this study (positive affect, negative affect, and constraint) and how they related to self-control, flexibility, and positive and negative expressiveness. Specifically we hypothesized that higher levels of positive affect would be related to lower levels of undermining coparenting while higher levels of negative affect and constraint would be related to higher levels of undermining coparenting for both mothers and fathers.

Division of Labor

Another largely unexplored variable in the predictors and correlates of coparenting quality is parents' division of labor. The one notable exception was a study by Van Egeren (2004), which found that both mothers and fathers felt more positive about their coparenting relationship when their expectations for the division of childcare were less violated. However, the converse was that mothers reported less positive coparenting experiences if they did more childcare post-birth than they reported they thought they would pre-birth. Furthermore, in looking at change over time, Van Egeren found that when mothers' expectations of childcare became less violated and fathers' more violated (i.e., mothers started doing less, fathers more), coparenting experiences improved for mothers. Interestingly this linear change over time was not noted for fathers. However, it was found that fathers who did more childcare post-birth reported having better coparenting experiences than those who did less. In the present study, we

do not examine violation of expectations, but rather assess how unequally household and childcare tasks are divided. However, the association between violation of expectations and less positive coparenting experiences that Van Egeren reported can be conceptualized in terms of unequal division of labor. Specifically, Van Egeren reported that mothers typically did more and fathers typically did less childcare than expected. Furthermore, fathers do less household and childcare tasks on average than mothers (Pleck & Masciadrelli, 2004). Thus, if a parents' expectations are being violated it is most likely that their division of labor is unequal. Consequently, it is reasonable to expect that an unequal division of household and childcare labor will be related to higher levels of undermining coparenting.

Gatekeeping

In addition to examining the direct effects of gender on coparenting, researchers have also examined how gatekeeping and fathers' relative involvement are related to coparenting. Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, and Sokolowski (2008) found that when mothers gave more encouragement to and criticized fathers less, coparenting quality was better. In the present study, we expect to replicate these findings. Specifically, we expect that when mothers encourage fathers' involvement that there will be less undermining coparenting. On the other hand, when mothers criticize and discourage fathers' involvement, undermining coparenting will be greater.

Child Characteristics

We now turn our attention to characteristics of the child that influence coparenting quality. We will first discuss how a child's gender influences coparenting. We will then review studies of how temperament is directly related to coparenting and how it interacts with martial quality to predict coparenting.

Gender

Little evidence has been found for children's gender directly influencing coparenting. Studies have reported no mean differences in coparenting quality in terms of child gender when the coparenting assessment considers both parents simultaneously (e.g. McHale, Kuersten-Hogan, et al, 2000). However, some differences have been identified in how women coparent boys versus girls. Margolin, Gordis, and John (2001) reported that mothers of boys were rated higher on triangulation than were mothers of girls, but there was no difference for fathers of boys versus fathers of girls. Similarly, Lindsey et al. (2005) found that mothers of sons were less intrusive than mothers of daughters. Since our coparenting assessment considers both parents simultaneously, we do not expect to find any gender differences.

Temperament

Infant difficulty (or at least parents' perceptions of infant difficulty) appears to be inversely related to coparenting quality. Van Egeren (2004) reported that fathers who perceived their infants as easier had better coparenting experiences. Similarly, Lindsey et al. (2005) found that when mothers perceive a one-year old child as more difficult, fathers display greater intrusiveness. Likewise, Gordon and Feldman (2008) found that fathers who viewed their infant as more unpredictable were observed to show less coparenting mutuality. Davis, Schoppe-Sullivan, Mangelsdorf, and Brown (2009) found concurrent associations between parents' perceptions of difficult temperament and supportive and undermining coparenting in parents of 3.5-month-olds. They also found that fathers' perceptions of infant difficulty at 3.5 months were negatively related to supportive coparenting at 13 months. Furthermore, infant difficulty was related to the stability of undermining coparenting over time. Specifically, undermining coparenting was stable from 3.5 to 13 months when the parents reported the child as being less

difficult, but not when the child was reported as being more difficult. Finally, McHale and Rotman (2007) found that positive and negative reactivity of the infant predicted subsequent higher and lower coparenting solidarity, respectively.

In addition to direct effect of infant temperament on coparenting, researchers have identified some interactions between infant temperament and maternal personality and infant temperament and marital quality. McHale, Kazali, Rotman, Talbot, Carleton, and Lieberson (2004) assessed mothers' pessimistic view about their future family, discrepancies in parenting ideology with their partner, and the division of labor. They found that maternal pessimism interacted with infant negative reactivity such that when the infant was high in negative reactivity, coparenting cohesion decreased as maternal pessimism increased. This relation was not found when infants were low on negative reactivity. Schoppe-Sullivan, Mangelsdorf, Brown, and Sokolowski (2007), in a study following families from the third trimester to 6 months, found an interaction between marital quality and infant temperament. Specifically, they found that in families where marital quality was low, undermining coparenting increased with infant unadaptability, but this was not true when marital quality was high. In the present study, we expect to replicate the finding that infant difficulty is related to more undermining coparenting. We will also be exploring the moderating role of temperament on other predictor variables. We have seen evidence of the moderating role of temperament in the results reported by McHale et al., as noted above, however, evidence is limited. Thus, this aspect of the present study is somewhat exploratory. However, we generally expect that levels of undermining coparenting will be the highest in families with a difficult child and another risk factor for undermining coparenting (i.e., unequal division of household labor, more depressive symptoms, more criticism and less encouragement of father involvement). The moderating role of

temperament on the association between parent personality and undermining coparenting is exploratory.

The Current Study

The current study examines the association between various predictors and undermining coparenting. Specifically, we explored the association between parent personality assessed pre-birth and undermining coparenting when the child was 3 years of age, hypothesizing that lower levels of positive affect and higher levels of negative affect and constraint would be related to undermining coparenting. We expected that an unequal division of labor assessed when the child was 3 months of age would be related to higher levels of undermining coparenting when the child was 3 years of age. Furthermore, we hypothesized that families in which mothers encouraged father involvement more when the child was age 1 would show less undermining coparenting while families in which mothers criticized father involvement would display more undermining coparenting two years later. We also predicted that families who perceived their child as more difficult when the child was 1 would exhibit more undermining coparenting when the child was three. Finally, we hypothesized that when mothers or fathers reported more depressive symptoms when the child was 1, couples would engage in more undermining coparenting two years later.

The present study also examined the moderating role of child temperament on other predictors of undermining coparenting. However, this aspect of the study was more exploratory. We offer the general predictions that levels of undermining coparenting will be the highest in families with a difficult child and another risk factor for undermining coparenting (i.e., unequal division of household labor, more depressive symptoms, more criticism and less encouragement of father involvement).

Methods

Participants

Seventy-six mothers, fathers, and their child living in central Illinois participated in the first four phases of a larger study. Participants were recruited in two waves through fliers posted in day cares, restaurants, stores, and other public locations. Because participants were recruited in two waves, sample sizes vary for different variables. Forty-seven families were recruited in the first phase when mothers were in the third trimester of pregnancy. Families participated in the second phase when children were approximately 3.5 months. In addition to the 47 families who were recruited previously, 29 additional families were recruited to participate in the third phase when their child was 1 year old. Families participated in the fourth phase when children were between 3.5 and 4 years of age. Participants received compensation in the form of a $20 gift card to a local store or restaurant for participation in the first phase, an infant "onesie" for the second phase, a $20 gift card for the parents and a book for the child for the third phase, and a $25 gift card for the fourth phase.

Because families were recruited in two waves, demographic information for the sample is given for when sample children were 1-year-old and the full sample was present. All children included in this study were born healthy and full-term. Thirty-nine children were male and 37 were female. Ninety-nine percent of the couples were married. Couples had been together an average of 4.8 years at the time of the birth of the child. At the time of the third visit, the average age of mothers was 32 (SD = 5.01) with a range of 22 to 43 (SD = 7.30). The average age of fathers was 35 (SD = 7.30) with a range of 23 to 65. Eighty-four percent of mothers were Caucasian, 5% were Latina, 5% were African-American, 3% were Asian-American, and 3% were of mixed race. Eighty percent of fathers were Caucasian, 7% were Latino, 5% were

African-American, 3% were Asian-American, 3% were of mixed race, and 3% did not report their ethnicity. For fifty-seven percent of parents, the child was their first together. Fifty-eight percent of children were first-born. Thirty-three percent of children were not first born. Birth order for 9% of the sample could not be determined because of inadequate or lack of parental response. At the time of the third visit, 7% of mothers reported having attended some college, 47% had earned a college degree, 24% had earned a masters degree, and 13% held a PhD. Educational attainment of 9% of mothers was not reported. At the time of the third visit, 1% of fathers reported having a high school degree, 11% reported having attended some college, 36% had earned a college degree, 22% had earned a masters degree, and 18% held a PhD. Educational attainment of 5% of fathers was not reported. The mean annual income for families was between $61,000 and $70,000 with a range of less than $10,000 to over $100,000. Annual income for 9% of the families was not reported.

Phase 1: Questionnaire during Third Trimester

Procedure

When the mother was in the third trimester of pregnancy, identical questionnaires were mailed to the mothers and fathers to complete separately. Means and standard deviations for study measures are presented in Table 1.

Measures

This investigation focused on one questionnaire from the first phase regarding personality measures.

Parent personality. Mothers and fathers were asked to independently complete the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982). This 300-item measure is designed for use with non-clinical samples. The eleven scales of the MPQ are: Social Potency,

Achievement, Wellbeing, Social Closeness, Stress Reactivity, Alienation, Aggression, Control, Harm, Traditionalism, and Absorption. These eleven scales are combined into three higher-order factor scores: Positive Affect (similar to Extroversion), Negative Affect (similar to Neuroticism), and Constraint (reflects rigidity and conformity). These three MPQ scales were internally consistent; the average Cronbach's alpha for the 11 scales for mothers and fathers was .84 (ranges .72 -.90 and .78-.89, respectively). These scales have been shown to be reliable over a 30-day re-test period (average r = .89, DiLalla, Gottesman, & Carey, & Vogler, 1997).

Phase 2: Questionnaire during Postpartum Home Visit at 3.5 Month

Procedure

The same mothers and fathers who completed questionnaires before the birth of their child were asked to complete a questionnaire about their family during a visit to their home.

Measures

The focus of this investigation involved one questionnaire from Phase 2 concerning the division of household labor and childcare tasks.

Division of household labor and childcare tasks. Couples jointly completed the Who Does What questionnaire (Cowan & Cowan, 1990) to assess the division of household labor and childcare tasks in the family. Couples rated on a 9-point scale (1= *she does it all* to 9 = *he does it all* with 5 = *we both do this equally*) on who typically handles 12 household tasks (e.g., planning and preparing meals, laundry, looking after the car) and 12 child care tasks (e.g., feeding the baby, playing with the baby). To assess how unequally tasks were divided between couples, an inequality score was created for each task by taking the absolute value of the couple's score for a task subtracted from 5. Consequently, couples who evenly divided a task received a 0 while couples in which one or the other parent always performed the task received a 4. Total

inequality scores for each couple were created by summing the inequality scores for all 24 tasks resulting in a potential range of scores from 0 to 96. Cronbach's alpha was .73 for the inequality scale.

Phase 3: Questionnaires when Child was One-year-old

Procedure

The same families who completed questionnaires when their child was 3.5-months-old were recruited to complete additional questionnaires when children were approximately 1 year old. Additionally, 29 new families with 1-year-old children were recruited to participate in this and the subsequent phase. Identical questionnaires about themselves, their families, and their relationships were mailed to the mothers and fathers to complete separately.

Measures

The focus of this investigation involved questionnaires concerning parents' demographic information, the mothers' and fathers' depressive symptoms, the temperament of the child, and mothers' encouragement and criticism of fathers' involvement with the child.

Demographic information. Mothers and fathers completed a demographic questionnaire developed specifically for this project. This questionnaire included questions pertaining to child birth status, parents' age, family income, parents' education, race/ethnicity, and pregnancy information (see Appendix).

Mothers' and fathers' depressive symptoms: Mothers and fathers independently completed a modified version of the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Each of the 14 items consists of a list of four statements arranged by increasing severity with 0 being the least and 3 being the most indicative of a depressive symptom. Total scores were created by summing the 14 items for mothers, $M = 2.47$, $SD = 2.40$,

and fathers, $M = 2.49$, $SD = 3.95$. Mothers' depressive symptoms and fathers' depressive symptoms were related, $r(57) = .31$, $p < .05$. Cronbach's alpha for depressive symptoms when the child was about one-year-old was .70 for mothers and .90 for fathers.

Infant temperament. Mothers and fathers completed the 6-month version of the Infant Characteristics Questionnaire (ICQ; Bates, Freeland, & Lounsbury, 1979). This measure is a 28-item questionnaire measure assessing infant temperament. The questionnaire produces a measure of difficulty which is comprised of the subscales of unadaptability, fussiness, and unpredictability. Cronbach's alphas for the difficulty construct were .80 for mothers and .76 for fathers.

Infant temperament ratings by mothers and fathers were positively correlated, $r(62) = .60$. Accordingly, the mothers' and fathers' difficulty ratings were averaged to create the composite 3-month Infant Difficulty, $M = 38.06$, $SD = 7.38$. For 6 cases for which fathers' ratings were not available, only mothers' ratings were used.

Mothers' Encouragement and Criticism of Fathers' Involvement. Mothers and fathers completed an adapted version of the Parental Regulation Inventory (PRI; Van Egeren, 2000). This questionnaire asks fathers to report on their partner's gatekeeping behavior and asks mothers to report on their own gatekeeping behavior. Each item is rated on a 6-point scale (1 = never, 6 = several times a day). Items reflecting criticism ("Tell your partner what you think he did wrong." or "Take over and do it your own way.") and encouragement ("Let your partner know you appreciate his contributions." or "Encourage your partner to spend time alone with your child.") were selected and summed to form mothers' criticism (8 items) and encouragement (9 items) scales, respectively. Cronbach's alphas for the criticism construct were .81 for mothers and .85 for fathers. Cronbach's alphas for the encouragement construct were .87 for mothers and

.86 for fathers. Ratings of encouragement and criticism for mothers and fathers were positively correlated, $r(62) = .56$ and $r(62) = .47$, respectively. Accordingly, mothers' and fathers' reports were averaged to form a criticism, $M = 33.45$, $SD = 6.36$, and an encouragement, $M = 19.17$, $SD = 5.52$, composite.

Phase 4: 3 Year Postpartum Home Visit

Procedure

The same families who participated in the third phase were recruited to participate in the fourth phase. Fathers, mothers, and their child were visited in their home when their child was approximately 3-years-old.

Measures

Coparenting quality. Fathers, mothers, and their child were filmed as they participated in a structured play task. The experimenter directed parents to work on building a playground out of Lincoln Logs together with their child for 15 minutes and provided them with instructions. This procedure was designed to elicit overt coparenting behavior as both parents interacted simultaneously with the child. Undermining coparenting quality during this episode was assessed using modified versions of the scales developed by Cowan & Cowan (1996) that assess undermining coparenting. Four scales assessed undermining coparenting: Displeasure, Coldness, Anger, and Competition. Displeasure reflects the degree to which parents express dislike of the way their partner interacts with their child and/or the relationship their partner has with their child. Parents who maintain a distance between themselves and their partner or show disdain for their partner are rated higher on Coldness. Parents express hostility towards each other score higher on Anger. Competition reflects the degree to which parents compete to interact with and direct the child or have the child respond to them or take their side. Coding was done by two

trained coders who overlapped on 36% of the videotapes. In addition, the coders jointly coded 11% of the videotapes. For displeasure, coldness, and anger, agreement within one scale point was 97%. For competition, agreement within one scale point was 100%. Gammas between coders ranged from .78 to .92 (M = .81). Scores for the parental dyad on displeasure, coldness, anger, and competition were averaged to form a composite score for undermining coparenting, M = 1.48, SD = .57. Cronbach's alpha for the undermining coparenting construct was .83.

Results

Analyses were conducted in several steps. First, correlations between demographic variables and undermining coparenting were computed. Next, correlations between demographic variables and predictor variables (i.e., parental personality, division of household labor and childcare tasks, mothers' encouragement and criticism of fathers' involvement, child temperament, and parents' depressive symptoms) were computed. In order to test for group differences based on the child's gender, on whether or not the child was the couples' first together, and on the phase in which the subjects were recruited, a series of independent sample t-tests were conducted to test for mean differences in undermining coparenting and predictor variables. Next, correlations between predictor variables and undermining coparenting were computed. Finally, a series of hierarchical regression analyses were conducted to investigate whether difficult temperament moderated the association between predictor variables and undermining coparenting.

Correlations between demographic variables and undermining coparenting and between demographic variables and predictor variables

Associations between demographic variables and undermining coparenting were explored (see Table 2). There were no significant associations. However, mothers' age was marginally significant in predicting undermining coparenting), $r(67) = -.21$, $p < .10$ such that older mothers were in couples that showed less undermining coparenting.

Associations between demographic variables and predictor variables were also examined (see Table 2). Fathers' education was significantly related to negative affect, $r(40) = -.41$, $p < .05$, such that fathers who scored higher on negative affect had less education. Fathers' education was also significantly associated with the combined report of mothers' encouragement

of fathers' involvement, $r(62) = -.32$, $p < .01$; fathers who were more educated received less encouragement.

Mean differences in undermining coparenting and predictor variables based on child gender, birth status, and recruitment phase

Independent sample t-tests were conducted to test for mean differences in undermining coparenting between parents of boys and parents of girls and between parents for whom the child was their first together and parents who had previously had a child together in the full sample. There were no significant differences. Independent sample t-tests were also conducted to test for mean differences in predictor variables. There were no gender differences in any of these variables. There was one significant difference based on birth status. Specifically, parents for whom the child was not their first together reported a less equal division of household and childcare tasks, $M = 50.35$, than parents for whom the child was their first, $M = 41.24$, $t(45) = 2.69$, $p < .05$

Because subjects were recruited in two different phases, independent sample t-tests were conducted to check for mean differences in undermining coparenting and its predictors in terms of the phase in which the subjects were recruited. There was only one significant difference. Parents who were recruited at Phase 1 scored higher on undermining coparenting, $M = 1.59$, than parents who were recruited at Phase 3, $M = 1.30$, $t(72.52) = 2.59$, $p < .05$. In order to explore this further, demographic differences between recruit groups were examined. Three significant differences emerged: mothers' age and fathers' and mothers' education level. Mothers recruited at Phase 3 were older, $M = 34.00$, than mothers recruited at Phase 1, $M = 30.42$, $t(65) = -3.06$, $p < .01$. Fathers recruited Phase 3 were more highly educated, $M = 5.00$, than fathers recruited at Phase 1, $M = 4.27$, $t(70) = -3.16$, $p < .01$. Mothers recruited at Phase 3 were marginally more

highly educated, $M = 4.71$, than mothers recruited at Phase 1, $M = 4.28$, $t(66) = -2.24$, $p = .05$. Consequently, we controlled for time of recruitment in subsequent analyses.

Correlations between predictor variables and undermining coparenting

Associations between undermining coparenting and predictor variables were explored (see Table 2). Fathers', but not mothers', positive affect as measured before the birth of the child predicted greater undermining coparenting when the child was approximately 3 years of age, such that fathers who scored higher on positive affect were later in couples who demonstrated greater undermining coparenting, $r(47) = .31$, $p < .05$. Similarly, fathers', but not mothers', negative affect predicted later undermining coparenting, $r(47) = .42$, $p < .01$. Neither fathers' nor mothers' constraint predicted undermining coparenting. Division of household and child care tasks when the child was approximately age 1 predicted undermining coparenting two years later, $r(47) = .30$, $p < .05$ such that parents who unequally divided these tasks showed greater undermining coparenting than parents who divided them more equally. Mothers' encouragement of fathers' involvement was correlated with undermining coparenting after controlling for time of recruitment, partial correlation $r(54) = -.29$, $p < .05$. Mothers who encouraged father involvement were later in couples who displayed less undermining coparenting. Mothers' criticism of fathers' involvement, child difficulty, and mothers' and fathers' depressive symptoms did not predict undermining coparenting.

It was surprising that fathers who scored higher on positive affect were later in couples that exhibited greater undermining coparenting. This association was explored by looking at the five major components of positive affect: well-being, social potency (i.e., dominance), achievement, social closeness, and absorption (see Table 4) (Tellegen, 1982). Of these five, only

two were significantly and positively related to undermining coparenting: social potency, $r(47) = .38$, $p < .01$, and absorption, $r(47) = .31$, $p < .05$.

Regression Analyses Testing Child Temperament as Moderator

To explore the possibility that child temperament moderated the association between other predictor variables and undermining coparenting, a series of hierarchical regression analyses were performed. Specifically, the moderating effect of child temperament on the association between undermining coparenting and parent personality measures, unequal division of household and child care tasks, mothers' encouragement and criticism of fathers' involvement, and parents' depressive symptoms was tested. Because there was a mean difference in undermining coparenting between those families who were recruited at Phase 1 and those recruited at Phase 3, a dummy variable for time of recruitment (-1 = recruited at Phase 1, 1 = recruited at Phase 3) was entered as the first step in all regressions that included questionnaires completed by subjects recruited from both phases (i.e., mothers' encouragement and criticism of fathers' involvement and parents' depressive symptoms). The second and third step consisted of the predictor variable and child temperament, respectively. Finally, the fourth step included the interaction term of child temperament and the predictor variable. Of the 11 sets of regressions performed, 3 were significant. Child temperament moderated the association between undermining coparenting and unequal division of household and childcare tasks, encouragement of father involvement, and fathers' depressive symptoms.

Unequal Division of Household and Childcare Tasks

The first set of regression analyses focused on whether child difficult temperament (assessed when the child was 1 year of age) moderated the association between the unequal division of household and childcare tasks (reported when the child was 3 months of age) and

undermining coparenting (observed when the child was three-years-old). The interaction term in this model was significant, $\beta = .46$, $p < .01$ (see Table 7). The interaction term explained an additional 17% of the variance in the overall final model, which was also significant, $F(3,36) = 5.47$, $p < .01$. A graph of this interaction is presented in Figure 1. A follow-up test was conducted using procedures outlined by Aiken and West (1991) for post-hoc investigation of interactions. The slope of the regression line representing less difficult children was not significantly different from zero, $\beta = -.12$, $p = .58$. The slope of the regression line representing more difficult children, however, was significantly different from zero, $\beta = .52$, $p < .01$. This suggests that undermining coparenting increases as a function of unequal division of household and childcare tasks in families with a more temperamentally difficult child, but not in families with a less difficult child.

Encouragement of Father Involvement

The second set of regression analyses focused on whether child difficult temperament (assessed when the child was 1 year of age) moderated the association between the combined parent report of mothers' encouragement of fathers' involvement (reported when the child was 1 year of age) and undermining coparenting (observed when the child was three-years-old). The interaction term in this model was significant, $\beta = -.32$, $p < .05$ (see Table 6). The interaction term explained an additional 9% of the variance in the overall final model, which was also significant, $F(4,57) = 3.59$, $p < .05$. A graph of this interaction is presented in Figure 2. A follow-up test was conducted using procedures outlined by Aiken and West (1991) for post-hoc investigation of interactions. The slope of the regression line representing less difficult children was not significantly different from zero, $\beta = .05$, $p = .77$. The slope of the regression line representing more difficult children, however, was significantly different from zero, $\beta = -.42$, $p <$

.01. This suggests that undermining coparenting decreases as a function of mothers' encouragement of father involvement in families with a more temperamentally difficult child, but not in families with a less difficult child.

Fathers' Depressive Symptoms

The final set of regression analyses focused on whether child difficult temperament (assessed when the child was 1 year of age) moderated the association between the fathers' depressive symptoms (reported when the child was 1 year of age) and undermining coparenting (observed when the child was three-years-old). The interaction term in this model was significant, $\beta = .43$, $p < .01$ (see Table 11). The interaction term explained an additional 18% of the variance in the overall final model, which was also significant, $F(4,53) = 4.78$, $p < .01$. A graph of this interaction is presented in Figure 3. A follow-up test was conducted using procedures outlined by Aiken and West (1991) for post-hoc investigation of interactions. The slope of the regression line representing less difficult children was significantly different from zero, $\beta = -.55$, $p < .05$. The slope of the regression line representing more difficult children was also significantly different from zero, $\beta = .84$, $p < .01$. This suggests that undermining coparenting increases as a function of fathers' depressive symptoms in families that perceive their child as more temperamentally difficult child, but decreases in families that perceive their child as less difficult.

Discussion

The current study investigated the associations between parental personality, division of labor, maternal gatekeeping behavior, and undermining coparenting. In addition, this study examined the role of child temperament in moderating these associations. Parent personality was related to undermining coparenting in a number of ways; e.g., couples in which fathers were higher on negative affect *or* higher on positive affect displayed more undermining coparenting. In terms of the division of household and childcare tasks, undermining coparenting was greatest in families whose division of labor was uneven. However, this association appears to apply only to those families who perceived their child as having a more difficult temperament. Although mothers' criticism of father involvement was not related to undermining coparenting, mothers' encouragement of father involvement was associated with less undermining coparenting as hypothesized. Again, however, this association only existed for those parents who perceived their child as difficult. Contrary to our hypotheses, mothers' and fathers' depressive symptoms were not related to undermining coparenting, although there was a significant interaction between fathers' depressive symptoms and child difficult temperament. Child difficult temperament was not directly related to undermining coparenting. However, child difficult temperament moderated the association between other predictors and undermining coparenting as hypothesized. Specifically, child difficulty moderated the association between undermining coparenting and unequal division of household labor, mothers' encouragement of father involvement, and fathers' depressive symptoms.

Given the mixed finding in previous research, the present study was somewhat exploratory in assessing the association between parents' personality and undermining coparenting. However, we offered specific hypotheses based on the three personality factors used

in this study, namely, that higher levels of positive affect would be related to lower levels of undermining coparenting while higher levels of negative affect and constraint would be related to higher levels of undermining coparenting for both mothers and fathers. Consistent with our hypothesis, results suggest that couples in which the father is higher on negative affect experience a more difficult time coparenting with each other. Kolak and Volling (2007) reported a similar finding that fathers and mothers were higher on negative expressiveness showed more coparenting conflict. Surprisingly, in the present study, mothers' negative affect was not related to undermining coparenting as hypothesized. The association between negative affect and undermining coparenting warrants further investigation in a larger sample.

Contrary to our hypothesis, higher levels of paternal positive affect were associated with higher levels of undermining coparenting. This is particularly surprising given that Kolak and Volling (2007) found that fathers who were higher on paternal positive expressiveness showed less triangulation and more cooperation. In investigating this association further, we found that of the five components of positive affect, only two were associated with undermining coparenting: social potency (i.e., dominance) and absorption. In describing characteristics of an individual high on social potency, Tellegen and Waller (1982) state that a person high on social potency "is forceful and decisive; is persuasive and likes to influence others; enjoys or would enjoy leadership roles; enjoys being noticed; being the center of attention" (p. 273). This suggests that fathers who are more dominant and forceful may struggle in coparenting with their partner. Indeed, while high levels of social potency may be an asset in others areas, it does not appear to be healthy for families, at least not in terms of coparenting. Given that absorption has to do with sensory and imaginative experiences (Tellegen & Waller), it is not clear why absorption and undermining coparenting are related, however it is possible that individuals high

on absorption are more likely to get "lost in thought" and thus be less available as a coparenting partner, which might lead to partner irritation. Furthermore, a mother may communicate displeasure about her partners parenting if he is prone to daydreaming rather than focusing on the family task. In contrast to paternal positive affect, maternal positive affect was not related to undermining coparenting.

Child difficult temperament did not have a direct effect on undermining coparenting as hypothesized; however, it did fill they expected role of a moderator. Consistent with our hypothesis, parents who divided household and childcare tasks unequally later displayed more undermining coparenting. Further analyses revealed that this association held for parents who perceived their child as more difficult, but not for families who identified their child as less difficult. This is consistent with past research linking coparenting experiences to child difficulty (Davis, Schoppe-Sullivan, Mangelsdorf, & Brown, 2009; Gordon & Feldman, 2008; Lindsey et al., 2005; McHale & Rotman; & Van Egeren, 2004) and division of childcare (Van Egeren, 2004) as well as our expectations that undermining coparenting would be the greater in families who have both an unequal division of labor and a difficult child. It may be that an unequal division of household tasks may be more acceptable to parents when the child is relatively easy. However, when a child is more difficult and thus requires more resources from the parents, an unequal division of labor may lead to more contention and anger between parents if one feels that the other is not contributing equally. Furthermore, if parents unequally divide tasks when the child is 3 months old, they may be establishing patterns that develop into unequal access and engagement with and thus competition over the child when he or she is older. In other words, unequal division of household and childcare tasks may be symptomatic of early gatekeeping behavior, which has been linked to undermining coparenting (Schoppe-Sullivan, et al., 2008).

One limitation of the present study is that we did not consider how parents felt about the division of labor in our analyses. Although a more egalitarian division of labor may be more desirable for many couples, others may be happy to divide tasks unequally so long as both partners feel they are doing equal work and/*or* they are satisfied with the way chores are divided. This would be an important direction for future research.

Gatekeeping behaviors of mothers' encouragement and criticism of father involvement were also examined. Contrary to our hypothesis and past findings (Schoppe-Sullivan et al., 2008), mothers' criticism was not predictive of undermining coparenting. However, mothers' encouragement of father involvement was predictive of undermining coparenting. Furthermore, couples demonstrated less undermining coparenting if mothers encouraged and praised their partners, but only if the child was difficult. This is consistent with our expectation that couples with a difficult child in which mothers gave more encouragement would show less undermining coparenting. Increased father involvement may be the mechanism by which mothers' encouragement reduces undermining coparenting. Past research offers support for this interpretation indicating that fathers may be less involved with a difficult child (e.g., Brown, McBride, Bost, & Shin, under review) and that father involvement is positively associated with maternal encouragement (Schoppe-Sullivan et al., 2008). Furthermore, Van Egeren (2004) reported that coparenting quality improved for mothers if fathers started doing more childcare tasks (i.e. became more involved). Thus, if mothers of temperamentally difficult children encourage their partners to become more involved and fathers do become more involved, then, coparenting quality may improve. Furthermore, mothers of temperamentally difficult children may want more assistance with their child than mothers of temperamentally easy children and may feel less resentment towards fathers if they are more involved. This in turn may lead to

more positive coparenting interactions. Thus, increased father involvement may mediate the relationship between mother encouragement of father involvement and undermining coparenting. The absence of an association between maternal encouragement and undermining coparenting for parents of temperamentally easy children may be a result of two factors. First, fathers may already be more involved with these children, so maternal encouragement may not have as much of an effect on increasing father involvement for these fathers compared to fathers of more difficult children. Second, mothers may not desire assistance with their child as much as mothers of temperamentally difficult children. Thus, encouraging and obtaining greater father involvement may not do as much to reduce feelings of resentment that the father is not more involved. However, the moderating role of child difficult temperament on the association between mothers' encouragement and father involvement has not been examined nor has the association between child difficult temperament and mothers' desires for fathers to be involved. The moderating role of temperament and the mediating role of father involvement would be important roles to consider in future research.

Finally, parents' depressive symptoms were not directly related to undermining coparenting as has been noted in some previous investigations (Elliston et al., 2008; Stright and Bales, 2003). This might be due to the low occurrence of depressive symptoms in our sample. However, fathers' depressive symptoms interacted with child difficult temperament to predict undermining coparenting. For parents of difficult children, undermining coparenting increased with fathers' depressive symptoms. This is consistent with our hypothesis that undermining coparenting would be greater in families that had both a parent with higher levels of depressive symptoms and a temperamentally difficult child. Past research has identified both of these as risk factors for undermining coparenting. Surprisingly, however, when parents reported that

their child was less temperamentally difficult, undermining coparenting *decreased* with fathers' depressive symptoms. Since our sample of fathers was relatively well-adjusted, it may be that their depressive symptoms manifest themselves during triadic interaction in the form of withdrawal. While withdrawal could lead to less *supportive* coparenting behaviors, a withdrawn parent is less likely to compete with or *undermine* the other parent during family interaction and may take a spectator role. Withdrawal, however, may only be an option for parents of less difficult children. A temperamentally easy child does not require as many parental resources as a difficult child. Consequently, the mother may be able to provide the child with adequate guidance and control without the father's help, allowing the mildly depressed father to take a passive role. However, if the child is more temperamentally difficult, the mother may demand that the mildly depressed father take a more active parenting role and may be more critical of his parenting, resulting in higher levels of undermining coparenting. A slightly depressed father who would rather observe but is being forced to engage his partner and child is more likely to interact negatively with them—his depression now manifesting itself in the form of aggression and irritation. His behaviors may undermine his partner's efforts and may lead to her being critical of his parenting. Thus child difficult temperament and father's depressive symptoms interact to produce two very different outcomes. Further investigation into how parents' depressive symptoms affect coparenting quality is warranted.

There was a significant mean difference in the amount of undermining coparenting displayed by recruitment phase. The families recruited at Phase 1 showed more undermining coparenting than the families recruited at Phase 3. Demographic differences between the two groups may account for the difference. Mothers in families recruited at Phase 3 were older than mothers of families who had been recruited at Phase 1. In our sample, there was a marginally

significant association between maternal age and undermining coparenting; couples with older mothers displayed less undermining coparenting. This is consistent with some past research indicating that older parents have better coparenting experiences (Lindsey et al., 2005; Van Egeren, 2003). Furthermore, mothers and fathers recruited at Phase 3 were more highly educated. Although there was no significant association between undermining coparenting and parents' education, past research has indicated that more educated parents have better coparenting experiences (Stright and Bales, 2003; Van Egeren, 2003; but see Gable, Belsky, and Crnic, 1995). Parents' education may be a contributing factor to the mean difference in undermining coparenting between these two groups. Because of the differences in undermining coparenting and demographic variables between recruitment groups, we controlled for time of recruitment in our analyses.

A number of limitations regarding this study should be noted. First, the relatively small sample sizes at some of the different time points of this study may be responsible for some of the null findings; we simply may have lacked adequate statistical power in some of our analyses. Hence, research with larger samples will help further our understanding of the predictors of undermining coparenting. Second, the community sample used in this study is fairly highly educated and largely Caucasian and middle-class. Therefore, the results may not be generalizable to other populations. Replication with more diverse samples may further expand our understanding of the predictors of undermining coparenting.

Despite its limitations, the results of this study provide important information about what parent and child characteristics predict undermining coparenting. Furthermore, it explores the important role child temperament plays in moderating associations between parent characteristics and undermining coparenting. This study points to the need for further research into the role

parents' and children's characteristic play in influencing coparenting quality. Parents, practitioners, and researchers will benefit from an increased understanding of the important role child temperament plays as well as the identification and exploration of predictors of coparenting quality that may serve as points of intervention.

Tables

Table 1

Descriptive Statistics for Study Measures

Measures		Mean	SD	Min	Max	n
Mother	Positive Affect	154.36	8.48	134.84	172.67	47
	Negative Affect	122.44	12.18	107.10	154.99	47
	Constraint	168.51	14.76	125.10	190.05	47
Father	Positive Affect	152.75	10.86	122.35	175.55	47
	Negative Affect	125.20	13.40	101.49	153.12	47
	Constraint	158.71	13.09	132.99	188.51	47
Unequal Division of Labor		45.50	12.35	21.00	83.00	47
Mothers' Encouragement		33.23	6.48	16.50	44.50	62
Mothers' Criticism		19.36	5.63	8.50	32.50	62
Child Difficult Temperament		38.05	7.38	27.00	59.00	68
Mothers' Depressive Symptoms		2.47	2.40	.00	11.00	65
Fathers' Depressive Symptoms		2.49	3.95	.00	19.00	58
Undermining Coparenting		1.48	.57	1.00	3.50	76

Table 2

Correlations between Demographic Variables and Undermining Coparenting and Predictor Variables

	Undermining Coparenting	Mothers' Age	Fathers' Age	Mothers' Education	Fathers' Education	Family Income
Undermining Coparenting	-	-.21†	-.12	.10	-.06	-.11
Mother Positive Affect	.05	-.18	.07	-.04	.01	.02
Father Positive Affect	.31*	-.24	-.05	.06	.06	.07
Mother Negative Affect	.05	-.27†	.06	-.20	-.18	.06
Father Negative Affect	.42**	-.17	-.22	-.16	-.41*	-.01
Mother Constraint	.17	-.17	-.15	.00	-.07	-.05
Father Constraint	-.02	-.01	.03	.03	-.01	.01
Unequal Division of Labor	.30*	-.16	-.04	-.01	.02	-.07
Mothers' Encouragement	-.20 (-.29*)	-.18	-.15	-.09	-.32**	-.04
Mothers' Criticism	.14 (.13)	.12	.10	.05	-.01	.08
Child Difficult Temperament	.10 (.14)	.22†	.06	.01	-.21	.09
Mother Depressive Symptoms	-.08 (.03)	-.05	.03	-.09	-.14	-.13
Father Depressive Symptoms	.12 (.16)	-.14	-.12	-.02	-.09	-.10

†$p < .10$; *$p < .05$; **$p < .01$ (two-tailed).

Partial correlations, controlling for time of recruitment, between predictor variables and undermining coparenting are given in parentheses.

Table 3

Intercorrelations among Predictor Variables

Scale	1	2	3	4	5	6	7	8	9	10	11	12
1. Mother Positive Affect		.03	.08	.10	.05	-.02	-.20	.28*	-.01	.25	.09	-.01
2. Mother Negative Affect			-.06	.03	.42**	-.44**	-.01	.06	.33**	-.01	.73**	.38*
3. Mother Constraint				.38**	.00	.39**	.10	-.02	.01	.28†	-.05	.03
4. Father Positive Affect					.22	.20	-.12	-.06	.11	-.15	-.15	-.02
5. Father Negative Affect						-.15	.29*	-.22†	.08	.29†	.21	.18
6. Father Constraint							.09	-.15	-.09	-.01	-.46**	-.22
7. Unequal Division of Labor								-.38*	.23	.42**	-.11	.15
8. Mothers' Encouragement									-.23†	-.13	-.06	-.28*
9. Mothers' Criticism										.10	.26*	.28*
10. Child Difficult Temperament											.17	0.08
11. Mothers' Depressive Symptoms												.31*
12. Fathers' Depressive Symptoms												

†$p < .10$; *$p < .05$; **$p < .01$ (two-tailed).

Table 4

Correlations between Components of Positive Affect and Undermining Coparenting

Scale	Undermining Coparenting
Well-being	-.08
Social Potency	.38**
Achievement	.21
Social Closeness	.19
Absorption	.31*

*$p < .05$; **$p < .01$ (two-tailed).

Table 5

Child Difficult Temperament as a Moderator of the Association between Unequal Division of Household and Childcare Tasks and Undermining Coparenting

Variables	*B*	*SE B*	β	ΔR^2	*F*	*df*
Step 1						
Unequal Division of Tasks	.02	.01	.35*	.13	5.45*	1,38
Step 2						
Unequal Division of Tasks	.02	.01	.29†			
Child Difficult Temperament	.01	.01	.17	.02	3.21†	2,37
Step 3						
Unequal Division of Tasks = A	.01	.01	.20			
Child Difficult Temperament = B	.00	.01	.01			
A × B	.00	.00	.46**	.17	5.47**	3,36

Note. Total $R^2 = .31$.
$^{\dagger}p < .10$; *$p < .05$; ** $p < .01$.

Table 6

Child Difficult Temperament as a Moderator of the Association between Mothers' Encouragement of Fathers' Involvement and Undermining Coparenting

Variables	*B*	*SE B*	*β*	ΔR^2	*F*	*df*
Step 1						
Recruitment Time	-.12	.07	-.23†	.05	3.39†	1, 60
Step 2						
Recruitment Time	-.15	.07	-.27*			
Mothers' Encouragement of Father Involvement	-.02	.01	-.24†	.06	3.68*	2, 59
Step 3						
Recruitment Time	-.15	.07	-.27*			
Mothers' Encouragement of Father Involvement	-.02	.01	-.24†			
Child Difficult Temperament	.00	.01	.02	.00	2.42†	3, 58
Step 4						
Recruitment Time	-.13	.07	-.23†			
Mothers' Encouragement of Father Involvement = A	-.02	.01	-.19			
Child Difficult Temperament = B	-.01	.01	-.06			
A × B	-.00	.00	-.32*	.09	3.59*	4, 57

Note. Total R^2 = .20.
$^{\dagger}p < .10$; *$p < .05$.

Table 7

Child Difficult Temperament as a Moderator of the Association between Fathers' Depressive Symptoms and Undermining Coparenting

Variables	*B*	*SE B*	*β*	ΔR^2	*F*	*df*
Step 1						
Recruitment Time	-.12	.07	-.23†	.05	3.20†	1, 56
Step 2						
Recruitment Time	-.13	.07	-.25†			
Fathers' Depressive Symptoms	.02	.02	.15	.02	2.26	2, 55
Step 3						
Recruitment Time	-.13	.07	-.26†			
Fathers' Depressive Symptoms	.02	.02	.14			
Child Difficult Temperament	.01	.01	.12	.02	1.79	3, 54
Step 4						
Recruitment Time	-.13	.06	-.26*			
Fathers' Depressive Symptoms = A	.02	.02	.15			
Child Difficult Temperament = B	.01	.01	.20			
A × B	.01	.00	.43**	.18	4.78**	4, 53

Note. Total R^2 = .27.
$^{\dagger}p < .10$; $^{*}p < .05$; $^{**}p < .01$.

Figures

Difficult Temperament as a Moderator of the Association between Unequal Division of Household and Childcare Tasks and Undermining Coparenting

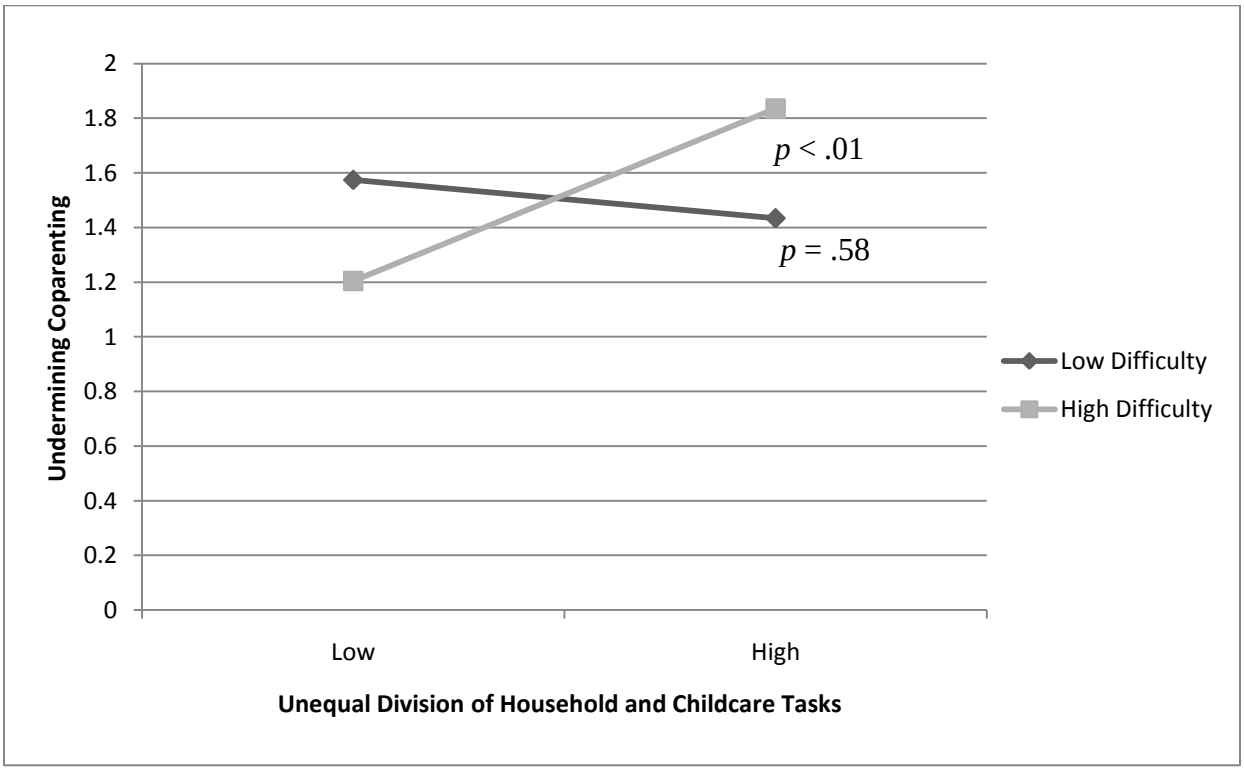

Fig. 1.

Difficult Temperament as a Moderator of the Association between Mother's Encouragement of Father Involvement and Undermining Coparenting

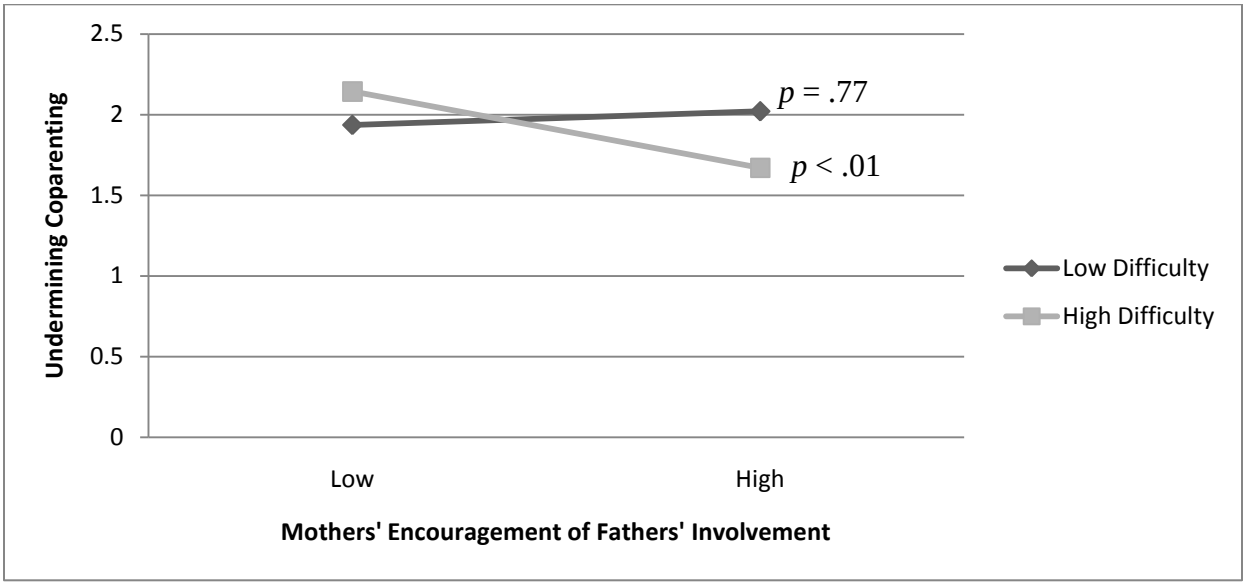

Fig. 2.

Difficult Temperament as a Moderator of the Association between Fathers' Depressive Symptoms and Undermining Coparenting

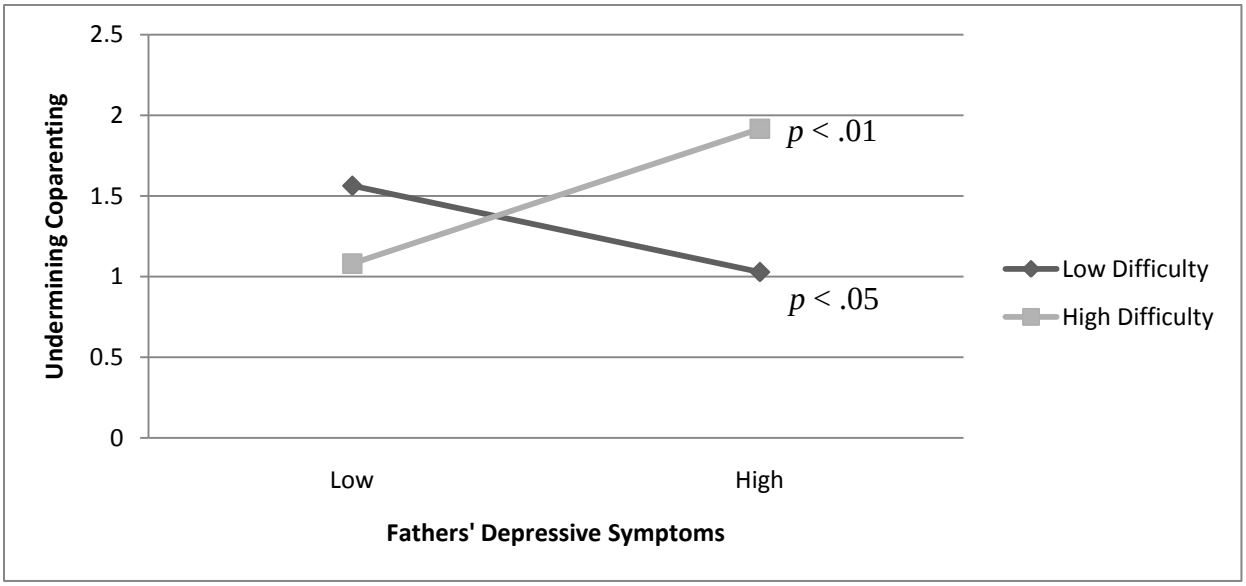

Fig. 3.

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Appendix

Mother's Demographic Questionnaire

General Questions:

Participant #: _____ Today's date: _____

Your birthdate: _____ Baby's birthdate: _____

Your race/ethnicity: _____ Gender of baby (circle): Male Female

Marriage date (if married): _____ Birth order of baby: _____

If living with partner, what was the approximate date you moved in together? _____

Siblings Name	Birthdate	Siblings Name	Birthdate
1		4	
2		5	
3		6	

Education:

Which best describes your current level of education?

Some High School	High School Degree	Some College	College Degree	Masters Degree	Ph.D. Degree	Other

If other, please describe: _____

_____

If education is not yet completed:

A. Which best describes your desired level of education?

Some High School	High School Degree	Some College	College Degree	Masters Degree	Ph.D. Degree	Other

If other, please describe:_____

_____

B. When do you expect to complete your educational goals? _____

Employment Status:

Are you currently working? YES NO

IF YES, please answer the questions in Section I; IF NO, please go to section II.

Section I

A. How many hours per week do you work (please circle)?

0-10 hrs. 11-20 hrs. 21-30 hrs. 31-40 hrs. 41-50 hrs. Over 50 hrs.

B. How old was your infant when you returned to work?_____months _____weeks

C. How do you feel about (returning to) work? (Please Circle)

Very Positive Positive Mixed Negative Very Negative

Could you briefly describe why you feel this way?_____

_____

_____

D. Please indicate your current job title and give a short description of your responsibilities: TITLE: _____

RESPONSIBILITIES: _____

_____

E. How does your partner feel about your (returning to) work?

Very Positive Positive Mixed Negative Very Negative

Could you briefly describe why you think your spouse feels this way?

_____

_____

F. How supportive was your workplace of you taking time off (circle one)?

Very Unsupportive Somewhat Unsupportive Neither Supportive nor Unsupportive Somewhat Supportive Very Supportive

G. Was this a paid or unpaid leave of absence? _____

NOW GO TO SECTION III

Section II

IF NO, do you plan to return to work? YES NO UNSURE

A. How old will your infant or child be when you plan to return to work?
_____ months

B. How many hours per week do you plan to work?
0-10 hrs 11-20 hrs 21-30 hrs 31-40 hrs 41-50 hrs Over 50 hrs

C. How do you feel about (not) returning to work?
Very Positive Positive Mixed Negative Very Negative
Could you briefly describe why you feel this way?_____
_____
_____

D. Please indicate your *previous* job title and give a short description of your responsibilities: TITLE: _____
RESPONSIBLITIES: _____
_____

E. Please indicate your *expected* job title (if planning on returning to work) and give a short description of your responsibilities: TITLE: _____
RESPONSIBLITIES: _____
_____

F. How does your spouse feel about your plans to (not) return to work?

Very Positive Positive Mixed Negative Very Negative
Could you briefly describe why you think your spouse feels this way?
_____
_____

G. How supportive is/was your workplace of you taking time off (circle one)?

Very Unsupportive	Somewhat Unsupportive	Neither Supportive nor Unsupportive	Somewhat Supportive	Very Supportive

H. Is this a paid or unpaid leave of absence? _____

NOW GO TO SECTION III

Section III

Financial Information:

Please indicate which best describes your family's total annual income (circle one):

less than $10, 000	$11,000-20, 000	$21,000-30,000	$31,000-40,000	$41,000-50,000	$51,000-60,000
$61,000 70,000	$71,000 80,000	$81,000 90,000	$91,000 100,000	over $100,000	

Is your partner currently employed? YES NO

How do you feel about your partner's current employment status?

Very Positive Positive Mixed Negative Very Negative

Could you briefly describe why you feel this way?_____

_____

_____

Family Background:

When you were growing up:

How involved was **your father** in raising you (circle one)?

very involved involved neutral uninvolved very uninvolved

How involved was **your mother** in raising you (circle one)?

very involved involved neutral uninvolved very uninvolved

Are your parents separated or divorced (circle one)? YES NO

If so, how old were you when the separation or divorce occurred? _____

Childcare:

1. How much time per day do **you** spend in **caregiving** activities (diapering, feeding, etc.) with your infant? (Please approximate)

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

2. How much time per day does your **partner** spend in **caregiving** activities (diapering, feeding, etc.) with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

3. How much time per day do **you** spend in **play** activities with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

4. How much time per day does your **partner** spend in **play** activities with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

5. Has your child attended childcare (been cared for regularly by someone other than you or your spouse)? YES NO

6. At what age did your child enter this childcare arrangement?

_____months _____weeks

____ not applicable

7. How would you best describe these childcare arrangements (circle all that apply)?

__ At home with Relative _____ hrs per week

What relation? _____

__ At home with Sitter/Nanny _____ hrs per week

__ Home-based child care center _____ hrs per week

__ Commercial child care center _____ hrs per week

__ Government/Community child care center _____ hrs per week

__ University child care center _____ hrs per week

__Other _____ hrs per week

Please describe: _____

8. What is the child: caregiver ratio of the care used most often? _____

9. How many other children are present?_____

10. Who is responsible for transporting your child to and from child care?

Me My Spouse Share Equally

Please describe any other changes in care arrangements since your child first began childcare. Include information concerning the child's age, the type of care, and the number of hours per week which that arrangement was used:

_____
_____
_____

Please indicate any other changes in your family since the last time we saw you when your baby was between 3 and 4 months old:

_____
_____
_____
_____
_____

Father's Demographic Questionnaire

General Questions:

Participant #: _____ Today's date: _____

Your birthdate: _____ Your race/ethnicity: _____

Education:

Which best describes your current level of education?

Some High School	High School Degree	Some College	College Degree	Masters Degree	Ph.D. Degree	Other

If other, please describe: _____

_____

If education is not yet completed:

A. Which best describes your desired level of education?

Some High School	High School Degree	Some College	College Degree	Masters Degree	Ph.D. Degree	Other

If other, please describe:_____

_____

B. When do you expect to complete your educational goals? _____

Employment Status:

Are you currently working? YES NO

IF YES, please answer the questions in Section I; IF NO, please go to section II.

Section I

A. How many hours per week do you work (please circle)?

0-10 hrs. 11-20 hrs. 21-30 hrs. 31-40 hrs. 41-50 hrs. Over 50 hrs.

B. How old was your infant when you returned to work?_____months _____weeks

C. How do you feel about (returning to) work? (Please Circle)

Very Positive | Positive | Mixed | Negative | Very Negative

Could you briefly describe why you feel this way?_____

_____

_____

D. Please indicate your current job title and give a short description of your responsibilities: TITLE: _____

RESPONSIBILITIES: _____

_____

E. How does your partner feel about your (returning to) work?

Very Positive | Positive | Mixed | Negative | Very Negative

Could you briefly describe why you think your spouse feels this way?

_____

_____

H. How supportive was your workplace of you taking time off (circle one)?

Very Unsupportive | Somewhat Unsupportive | Neither Supportive nor Unsupportive | Somewhat Supportive | Very Supportive

G. Was this a paid or unpaid leave of absence? _____

NOW GO TO SECTION III

Section II

IF NO, do you plan to return to work? YES NO UNSURE

A. How old will your infant or child be when you plan to return to work?
_____ months

B. How many hours per week do you plan to work?
0-10 hrs 11-20 hrs 21-30 hrs 31-40 hrs 41-50 hrs Over 50 hrs

C. How do you feel about (not) returning to work?
Very Positive Positive Mixed Negative Very Negative
Could you briefly describe why you feel this way?_____
_____
_____

D. Please indicate your *previous* job title and give a short description of your responsibilities: TITLE: _____
RESPONSIBLITIES: _____
_____

F. Please indicate your *expected* job title (if planning on returning to work) and give a short description of your responsibilities: TITLE: _____
RESPONSIBLITIES: _____
_____

F. How does your spouse feel about your plans to (not) return to work?

Very Positive Positive Mixed Negative Very Negative
Could you briefly describe why you think your spouse feels this way?
_____
_____

I. How supportive is/was your workplace of you taking time off (circle one)?

Very Unsupportive	Somewhat Unsupportive	Neither Supportive nor Unsupportive	Somewhat Supportive	Very Supportive

H. Is this a paid or unpaid leave of absence? _____

NOW GO TO SECTION III

Section III

Financial Information:

Please indicate which best describes your family's total annual income (circle one):

less than $10, 000	$11,000-20, 000	$21,000-30,000	$31,000-40,000	$41,000-50,000	$51,000-60,000
$61,000 70,000	$71,000 80,000	$81,000 90,000	$91,000 100,000	over $100,000	

Is your partner currently employed? YES NO

How do you feel about your partner's current employment status?

Very Positive Positive Mixed Negative Very Negative

Could you briefly describe why you feel this way?_____

_____

_____

Family Background:

When you were growing up:

How involved was **your father** in raising you (circle one)?

very involved involved neutral uninvolved very uninvolved

How involved was **your mother** in raising you (circle one)?

very involved involved neutral uninvolved very uninvolved

Are your parents separated or divorced (circle one)? YES NO

If so, how old were you when the separation or divorce occurred? _____

Childcare:

1. How much time per day do **you** spend in **caregiving** activities (diapering, feeding, etc.) with your infant? (Please approximate)

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

2. How much time per day does your **partner** spend in **caregiving** activities (diapering, feeding, etc.) with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

3. How much time per day do **you** spend in **play** activities with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

4. How much time per day does your **partner** spend in **play** activities with your infant?

less than 1 hr 1-3 hrs 4-6 hrs 7-10 hrs 11-15 hrs More than 15 hrs

5. Has your child attended childcare (been cared for regularly by someone other than you or your spouse)? YES NO

6. At what age did your child enter this childcare arrangement?

_____months _____weeks ____ not applicable

7. How would you best describe these childcare arrangements (circle all that apply)?

__ At home with Relative _____ hrs per week

What relation? _____

__ At home with Sitter/Nanny _____ hrs per week

__ Home-based child care center _____ hrs per week

__ Commercial child care center _____ hrs per week

__ Government/Community child care center _____ hrs per week

__ University child care center _____ hrs per week

__Other _____ hrs per week

Please describe: _____

8. What is the child: caregiver ratio of the care used most often? _____

9. How many other children are present?_____

10. Who is responsible for transporting your child to and from child care?

Me My Spouse Share Equally

Please describe any other changes in care arrangements since your child first began childcare. Include information concerning the child's age, the type of care, and the number of hours per week which that arrangement was used:

_____
_____
_____

Please indicate any other changes in your family since the last time we saw you when your baby was between 3 and 4 months old:

_____
_____
_____
_____
_____