

Relationship quality with pre-school children: How paid and domestic work matter to her, him, and them

Pia Schober
(p.s.schober@lse.ac.uk)
London School of Economics and Political Science

Paper to be presented at the European Population Conference 2008, 9-12 July, Barcelona, Spain

Abstract

Most longitudinal studies comparing couples' marital satisfaction before and after becoming parents have found a decrease in both partners' happiness with the relationship at least temporarily after the birth of their first child (e.g. Twenge, Campbell et al. 2003). Recent UK studies also find a reversal in the previously established stabilising effect of children (Chan and Halpin 2005). This study provides the first investigation of British couples' relationship quality when they have preschool children, who seem to face an increasing risk of experiencing parental family breakdown. For most couples, the transition to parenthood results in a significant increase in time spent on domestic work especially due to time-intensive childcare. This is often accompanied by a shift towards a more traditional division of domestic work and reduction in paid work of at least one partner (usually the mother). To date, there is a lack of evidence as on how couples' division of childcare may matter to relationship quality. Despite considerable literature on housework and paid work, we also know very little specifically for couples with preschool children. This paper provides new British evidence on how the satisfaction with one's partner and couples' relationship stability during their first years of parenthood is associated with differences in partners' division of childcare, housework and paid work. Based on data from the British Household Panel Survey (1994-2005), the empirical analysis uses OLS regression and event-history analysis. The results suggest that couples who share childcare are less likely to separate than those where mothers are mainly responsible for childcare, even though sharing is associated with lower satisfaction with the partner for couples with just one child. In contrast to previous findings for other couple populations, housework or paid work division seem to matter less than childcare for couples' relationship quality during the early years of parenthood.

1 Introduction

Most longitudinal studies comparing couples' marital satisfaction before and after becoming parents have found a decrease in both partners' happiness with the relationship at least temporarily after the birth of their first child (e.g. Glenn and McLanahan 1982; Belsky, Spanier et al. 1983; Gable, Belsky et al. 1995; Demo and Cox 2000; Twenge, Campbell et al. 2003). Recent UK studies also find a reversal in the previously established stabilising effect of children (Böheim and Ermisch 2001; Chan and Halpin 2002; Chan and Halpin 2005). Among recent cohorts even couples with pre-school children do not have a lower risk of breakdown anymore than childless couples (Chan and Halpin 2005). Chan and Halpin also present evidence that this is likely to relate to the increase in extra-marital births to cohabiting couples. The percentage of children aged below five who experience parental divorce has been increasing since a reduction of the minimum period after which one partner can petition for divorce in the mid 1980s (Haskey 1997). Furthermore, the larger separation risk of cohabiting couples (e.g. Gershuny and Berthoud 1997) also means that a large percentage of children who experience their unmarried parents' separation do so at a young age. Although alternative living arrangements are increasingly seen as acceptable to bring up children as the two-parent family (Barlow, Burgoyne et al. 2008), a lot of studies have found that family breakdown is associated with disadvantages in terms of a range of childhood, adolescent, and adult outcomes (Bumpass 1990; Kiernan 1992; Amato 1993; Kiernan 1997; Ely, Richards et al. 1999; Sigle-Rushton, Hobcraft et al. 2005). This association seems stronger when children experience their parents' divorce at younger ages (Lyngstad and Engelhardt 2007; Steele, Sigle-Rushton et al. 2007). This analysis therefore concentrates on relationship quality of parents with preschool children, since they seem to be at increasing risk of family breakdown.

For most couples, the transition to parenthood results in significant increases in time spent on domestic work especially due to time-intensive childcare over the first few years. This is often accompanied by a reduction in paid work involvement of at least one partner (usually the mother) or a larger total workload for one or both partners. From a meta-analysis of the existing literature on differences in the parenthood effect on relationship satisfaction across different groups, Twenge et al (2003) infer that there is greatest support for some sort of work-family role conflict lowering fathers' and especially mothers' relationship satisfaction rather than an increased financial burden or sexual dissatisfaction. This paper attempts to provide more detailed evidence on how the satisfaction with one's partner and couples' relationship stability during their first years of

parenthood is associated with differences in partners' division of childcare and housework as well as their total workload as a combination of time spent on paid work and housework.

Previous longitudinal research provides evidence on the negative association of an unequal division or unfairness perceptions of housework and marital quality either for samples of all couples or specifically dual-earner couples (Pleck 1985; Pina and Bengtson 1993; Chan and Halpin 2002; Frisco and Williams 2003; Chan and Halpin 2005) or focuses only on those with children of school age or older (Kalmijn 1999; Voydanoff and Donnelly 1999; Helms-Erikson 2001). Similarly, most existing studies investigating the importance of childcare for parents' relationships are largely based on couples with primary or secondary school children, for whom childcare is less time consuming and involves less routine and more socialisation aspects than for infants (Kalmijn 1999; Voydanoff and Donnelly 1999). Hence so far we lack recent evidence about the relationship between couples' division of housework and childcare and relationship quality among parents with pre-school children. While some studies investigate the relationship between both partners' time spent in paid and domestic work and increased risk of time poverty, multitasking, and perceived time pressure of couples with young children (Bittman and Wajcman 2000; Bianchi, Robinson et al. 2006), associations of mothers' and fathers' workload or work-family role conflict with couples' relationship quality have not been explored yet.

The following section presents some theoretical perspectives and empirical evidence that are relevant to answering these questions. Based on these, three hypotheses regarding the importance of i) couples' housework allocation, ii) the division of childcare responsibility, and iii) both partners' total workload are formulated which are then tested using data from the British Household Panel Survey. Details on the measures and methods used for the empirical analysis are given in Section 3 and 4. Section 5 presents the results followed by a more detailed interpretation in the light of previous research in section 6. The chapter concludes by considering the trade-offs made in the analysis and how these limitations could be overcome and improved in future research.

2 Theoretical framework

This paper focuses on couples' division of housework and childcare and either partner's time spent on paid work and housework as the main components of mothers' and fathers' work/family life, which may consist of balanced or conflicting demands. To derive hypotheses with respect to how couples' division of housework is associated with relationship satisfaction and stability after transition to parenthood, I draw mainly on the distributive justice perspective. The marital

dependency approach and empirical evidence from previous studies guide my expectations regarding the importance of couples' childcare division during the early years of parenthood. For partners' paid and total work hours, I base my propositions on role strain theory and empirical investigations of family variations in time poverty and perceived time pressure and contrast these with the financial independence argument of the neo-classical economic theory.

Distributive justice in housework

The distributive justice perspective posits that relationship quality relies on each partner perceiving their contribution as fair or equitable. Equity in close relationships refers to the perceived balance in the relationship between partners' inputs and outcomes. In exchange situations, the equity principle assumes that family members seek to maximise their utility and expect the distribution of outputs or rewards to be proportional to each person's inputs (Walster, Walster et al. 1978; Deutsch 1985). Major contends that people's sense of entitlement depends on the outcomes they desire from their efforts, comparison referents and justifications for not receiving less than the desired outcomes (Major 1987). These fairness evaluations therefore depend on family members' expectations, since they compare their actual rewards with those they think they deserve. These expectations largely derived from the social context in which they are embedded. Two relevant criteria for mothers' evaluations whether the division of housework is fair are women's contributions in others areas such as labour market work and their gender role attitudes. Women gender attitudes are assumed to shape their comparison referents with women holding egalitarian attitudes being more likely to compare themselves to their male partners, while traditional attitudes result in mothers making more comparisons with other women. For our case of mothers of pre-school children, this suggests that their gender role attitudes and their paid work status will moderate how the division of domestic work translates into satisfaction with the relationship and their likelihood to separate. I would therefore expect an unequal division of housework or a large change towards a more traditional division of housework since pre-birth to lower mothers' satisfaction with their partner and increase their separation risk for relatively egalitarian women or women who at the same time work full-time¹. Since previous studies find that men rarely perceive the division of labour as unfair to them (Wilkie, Ferree et al. 1998) or report being stressed as a result (Crompton and Lyonette 2008), such an association is unlikely to be significant for men's satisfaction with their partners.

¹ While a woman's workload relative to her partner's as a measure of gender equity in the division of total work ideally should include paid work, housework and childcare, I lack an appropriate measure of childcare time which constitutes a large part of the time spent by parents with small children. The interaction between women's housework and paid work share is therefore used as a proxy.

There is substantial evidence from studies based on samples of all couples, couples with two earners or with older children which suggest that an unequal division of housework or perceptions of unfairness in household labour reduce women's marital satisfaction and increase couples' odds of divorce (Pleck 1985; Yogev and Brett 1985; Sutor 1991; Greenstein 1995; Wilkie, Ferree et al. 1998; Voydanoff and Donnelly 1999; Helms-Erikson 2001; Frisco and Williams 2003). In accordance with theory, most of these also find the division of housework to be significant only when women are full-time employed, have relatively high incomes or hold non-traditional gender attitudes (Pina and Bengtson 1993; Sanchez, Manning et al. 1998; Chan and Halpin 2002), while only few find no significant association (Gager and Sanchez 2003; Cooke 2004). Earlier results from psychological studies on marital satisfaction right after transition to parenthood are mixed with some suggesting that a traditional division of housework lowers women's marital satisfaction if it is at odds with their gender role attitudes (Belsky, Lang et al. 1986), while others find no such effect for a mismatch between couples' practice and women's pre-birth expectations (Ruble, Fleming et al. 1988).

Division of childcare: contrasting arguments

In comparison with housework division, childcare appears to be less prone to inducing feelings of unfairness among couples. Based on the literature the effect on couples' satisfaction with each other and their stability also seems to be more complex than for housework chores. Previously some scholars have expressed trust in "new couples" with working mothers and nurturing fathers to take the place of the traditional family model in the not too far future and that greater empathy and companionship among partners with symmetrical roles can enhance partnership satisfaction (Scanzoni 1978; Simpson and England 1981). Albeit visible, gender role changes especially in the home however has been slow (Barclay and Lupton 1999; Bianchi 2000; e.g. see Bianchi, Milkie et al. 2000; Sullivan 2000; Bianchi, Robinson et al. 2006). Empirical evidence on the association with couples' relationship quality is also mixed. Mothers' seem to enjoy caring for infants more than fathers (Demo and Cox 2000) and ideals of intensive mothering according to which mothers know intuitively what is good for their child and should or want to respond immediately to all of the child's needs are still widespread especially for infants (for reviews see Thompson and Walker 1989; Arendell 2000). Following this image, mothers' role as the primary carer for a pre-school child is still widely viewed as the norm and some mothers may even be reluctant to hand over responsibility of young children to fathers, since this would threaten their carer identities (Thompson and Walker 1989; Fox 2001; Gatrell 2007). Furthermore, earlier empirical evidence suggests that fathers' greater childcare involvement is correlated with greater marital conflict and

dissatisfaction with the partner or the relationship for men and women (Hoffman 1983; Russel and Radin 1983; Baruch and Barnett 1986; Lamb 1986; Crouter, Perry-Jenkins et al. 1987). More recent results for couples with older children suggest a positive correlation between shared childcare and relationship satisfaction among parents with older children in the Netherlands. However, even these Dutch mothers seem to appreciate mainly when fathers spend time with the child in socialisation activities, whereas sharing of routine childcare task is less important (Kalmijn 1999). As a large part of the childcare for small children consists of routine tasks that need to be very much structured around the needs of the child as opposed to educational and play time with older children, which fathers seem to prefer (Bittman and Pixley 1997; Bianchi, Milkie et al. 2000; Bianchi, Robinson et al. 2006; Gatrell 2007). Hence, I would expect many mothers with pre-school children to be more satisfied with their partner when they are mainly responsible for childcare as opposed to both partners sharing it, as this may conflict with their identities as mothers. While an increasing number of fathers seem to appreciate spending some time and getting to know their infants (Barclay and Lupton 1999; Bianchi 2000), I suppose that most fathers still regard providing as their main responsibility and are therefore more satisfied with their partner when the latter bears most of the childcare responsibility as long as the child is small.

In contrast to these predictions for the associations between couples' childcare division and the satisfaction with their partner, I would expect the opposite for their relationship stability. Following the marital dependency model (England and Kilbourne 1990, 180), smaller differences in bonds with children between mothers and fathers should decrease the likelihood of parents' splitting up, since both partners would want to avoid being separated from their children. Therefore, shared roles in childcare should lead to more stable relationships. Previous evidence among couples with older children confirms that shared childcare reduces couples' separation risk in the Netherlands (Kalmijn 1999) but not in Germany (Cooke 2004). So far however there is no evidence specifically for couples with pre-school children.

Work-family role conflict

Role strain theory contends that people are likely to perceive multiple roles as strain or conflict demands if they occupy different roles that both take considerable amounts of time and energy (Goode 1970) and if the commitment to one role is stronger than to the others (Marks 1977). I would expect work-family role conflict perceived by mothers or fathers to reduce their relationship quality, since they are probably less able to devote enough energy to emotion work and active time with their partner, when one or both of them feel exhausted or stressed. In absence of measures of

perceived role overload, I assume that the amount of stress and time poverty will be largest for men and women if they spend considerable hours in paid and domestic work in addition to having a small child at home. While some people may be equally positively committed to all their roles, among many parents with small children, over- and undercommitment is likely to occur e.g. for men and women who would prefer to spend more time with their child but feel the need to earn money or fulfil career expectations or conversely. These may also vary at times within any one individual.

Empirically, we have evidence of time poverty occurring especially among dual-earner couples with pre-school children. The care responsibilities of a small child drastically reduce leisure time and personal care time for both mothers and fathers and impact negatively on the amount of time couples spend on their own without children (Bittman and Wajcman 2000; Bianchi, Robinson et al. 2006). Mothers typically experience greater work-family strains than fathers (Barnett, Brennan et al. 1994; Duxbury, Higgins et al. 1994; Marshall, Barnett et al. 1998). Previous studies on all couples or dual-earner couples examined the correlation between fathers' paid work hours and perceived role overload as well as marital quality and did not find significant correlations (Coverman 1989; Hughes, Galinsky et al. 1992; Pittman 1994). Albeit not ideal, I use a slightly improved measure by summing weekly paid work and housework hours as a proxy for work-family conflict among parents with pre-school children. For the empirical analysis, I hence expect longer total work hours as a sum of paid work and housework hours to reduce both parents' satisfaction with the partner and also the stability of the partnership, albeit the effect is likely to be stronger for mothers.

Alternatively, both women and men are probably regard mothers' jobs as more flexible and subject to choice than fathers' paid work and may therefore attribute increased family stress and role conflicts more to women's paid work hours than fathers'. Following this alternative argument, mothers' paid work hours should have a significant effect on their own and more so than their total hours as a combination of housework and paid work, while women's housework hours should be insignificant since they are unlikely to be at odds with the ideals of motherhood. Another competing argument regarding the relationship between women's paid work and separation risk is based on the neo-classical economic perspective (Becker 1991), according to which mothers with higher relative earnings compared to their partner face lower costs of exiting the relationship. A large range of studies find a significant association between women's financial independence and couples' higher dissolution risk (e.g. Heckert, Nowak et al. 1998; Ono 1998; Poortman and Kalmijn 2002; Rogers 2004; Poortman 2005). However, among the group of couples with young children time is a

particularly scarce resource and is likely to be more important than economic bargaining power. Therefore the main hypothesis in this paper concentrates on the importance of hours spent on paid work and housework for couples' relationship quality after becoming parents. However, to test possible counterevidence, I will also examine associations with women's relative resources.

Based on these theoretical perspectives and to-date empirical evidence, I derive the following three hypotheses regarding the association with women's and men's relationship satisfaction and odds of separation among couples with small children:

Hypothesis 1: Housework inequality hypothesis

Women in couples with more equal division of housework or who experience less change towards inequality are assumed to be more satisfied with their partner if they hold relatively egalitarian gender attitudes or work for pay full-time. More equal sharing of housework is also assumed to increase relationship stability among these couples.

Hypothesis 2: Childcare responsibility hypothesis

Both mothers and fathers are expected to be more satisfied with their partner when mothers are mainly responsible for childcare. Shared childcare responsibility however is likely to reduce couples' separation risk as opposed to when the mother is mainly responsible.

Hypothesis 3: Work-family role strain hypothesis

The larger each partner's own total hours as a combination of paid work and housework, the lower will be their satisfaction with the partner and the couple's relationship stability. Two competing arguments for Hypothesis 3 will examine whether work-family conflict is instead driven mainly by mothers' paid work hours or whether mothers' financial independence is more significant for couples' separation risk than mothers' total work hours.

Interactions and control factors for satisfaction with one's partner and separation risk

The analysis of parents' satisfaction with the partner focuses on the third year after having their first child, since I want to use lagged explanatory variables and measures couples' domestic work and total workload after most mothers have returned to work, which is only the case in the second year after birth. During the first three years a considerable percentage of couples have a second child. Two small children are likely to increase the time and energy that families devote to childcare. An

unequal division of housework and longer total work hours may therefore have a greater negative effect on these couples' satisfaction with the partner, since couples who already have a second child or where mothers are pregnant with the second one may perceive greater work-family conflict and dissatisfaction than those who have only one child. Furthermore, having the main responsibility for childcare may become more burdensome when they have another infant to look after. For couples having a second child within three years after the first one, I would therefore expect mothers' childcare responsibility to show an insignificant or even negative association. In Chapter 5, I found that couples are more likely to have a second child soon after the first e.g. if they have college degrees or if mothers do not work for pay. Other unobserved selection factors may include the desired number of children. To take account of the different situation and these selection effects of couples with a second birth, I will therefore test the hypotheses separately for the two groups of couples by including interactions.

Oppenheimer (Oppenheimer 1994; Oppenheimer 1997) and subsequent empirical results (Conger, Glen H. Elder et al. 1990; Heckert, Nowak et al. 1998; Poortman 2005) stress the advantages of dual-earner couples for relationship satisfaction and stability due to reduced financial strains and greater adaptability to events that may pose risks to one partners' employment. I therefore control for the other partner's paid work hours and couples' monthly earnings. In addition to the loss of one earner, the first time after birth may put stress on the relationship when mothers suffer from post-natal depression or other feelings of exhaustion especially after a Cesarean section. I therefore control for women's psychological well-being.

Theoretical work on women's fairness perceptions proposed the importance of women's sense of feeling appreciated and understood by their husbands and women's comparison referents (Major 1987; Thompson 1991). In line with these perspectives, Hawkins et al. find that wives' feelings of being appreciated and whether women compared their contributions to other women or to their husbands were equally strong predictors than partners' relative time spent on different household tasks (Hawkins, Marshall et al. 1995). While I do not have this specific information, partners' similarity in their gender attitudes may contribute to wives feeling understood and appreciated by their husbands. In line with this reasoning, Sanchez, Manning and Smock (1998) find a greater likelihood of separation among couples where the woman is more egalitarian than her partner. Furthermore, I use women's gender attitudes as a proxy for their comparative referents, since women with egalitarian attitudes are more likely to make comparisons between genders and therefore more likely to perceive the division of labour as unfair to them than more traditional

women who compare themselves more to other women. Previous studies frequently found women's egalitarian gender attitudes to be negatively associated with partnership stability (Kaufman 2000; Gatrell 2007), while men's attitudes were insignificant. Moreover very liberal attitudes towards divorce of either partner are expected to lower relationship stability.

While couples of higher socio-economics status show a greater reduction in marital satisfaction around childbirth (Twenge, Campbell et al. 2003), couples' with less than A-level education have generally been found to have a higher separation risk than those where one or both partners have medium or high levels of education. An exception may be couples where women are substantially more educated than their partner, which also seems to increase instability (Kalmijn 1999; Steele, Sigle-Rushton et al. 2007). The stability of couples' relationships has also been shown to vary with the age difference between partners with couples where the man is of equal age or slightly older than the woman being less likely to dissolve than couples where the female partners is older than the male (Steele, Sigle-Rushton et al. 2007). Couples' educational levels and age difference are therefore controlled for.

Finally I consider a number of factors relating to partners' relationship and fertility histories. I include woman's age at birth and whether the woman had a pre-marital birth, since young couples and those having a birth out of wedlock may be more likely to break-up (Waite and Lillard 1991; Chan and Halpin 2005; Steele, Sigle-Rushton et al. 2007). Couples' relationship stability also tends to increase with longer relationship duration (MacDermid, Huston et al. 1990). Except for a few studies that control for individual unobserved heterogeneity, a greater risk to dissolve has been found for couples where one partner has previously been married and experienced a separation or divorce (Beaujouan 2007; Steele, Sigle-Rushton et al. 2007). As having a child in another household may also impact negatively on relationship quality (Steele, Sigle-Rushton et al. 2007) especially during the early years of parenthood when time is scarce and support most needed, I also include a control for whether the male partner already had a child with a previous partner.

3 Data and methods of analysis

Methods and sample selection

I use the British Household Panel Survey to test the three hypothesis for mothers' and fathers' satisfaction with the partner and relationship stability respectively. For examining the relationship between women's and men's satisfaction with the partner and couples' total workload as well as

domestic and paid work arrangements, I use OLS models of partner satisfaction in the third year after birth with explanatory variables measured in the second year after birth. Domestic and paid work measures in the second year after birth are superior to measures in the first year as for many couples the latter is exceptional in terms of mothers' maternity and parental leave and women are less likely to feel frustrated with a short-term change in the division of labour. I control for women's and men's satisfaction with the partner before birth, as my main interest is in explaining the change in couples' satisfaction during transition to parenthood and since some scholars have argued that relationship satisfaction is like a relatively stable personal characteristic that is not completely explained through observable factors (Belsky, Spanier et al. 1983). The question on satisfaction with one's partner is asked only from 1997 onwards and was interrupted for one year in 2001. Hence I limit my sample to couples who have a birth from 1997 onwards and for whom I have data on their satisfaction just before and in the third year after birth. While fixed-effects panel data models over several years after birth would also account for time-invariant unobserved individual heterogeneity, it would be very difficult to account for differences in effects one and two years after birth and for couples with one or two children, especially given the small sample size.

To explore the association between couples' relationship stability over the first years after becoming parents and domestic work division or work-family role strain, I apply event-history analysis. While the duration dependency of the baseline hazard would be theoretically interesting, it is not possible with yearly data for the short time period from two to five years after transition to parenthood. Hence I use a Cox proportional hazard model adjusting for tied survival data. To reduce the risk of endogeneity between separation risk and the explanatory variables, I use first order lags of the explanatory variables. Measures of housework and childcare are only available on a yearly basis from 1994 onwards, so this is the earliest possible start date. Since the number of couples with small children who separate in my dataset is very small, I use all twelve available waves (1994-2005) of data for the separation risk analysis despite some limitations with regard to comparability of the results with those for satisfaction with the partner. I limit my observations of relationship stability from the second to the fifth year after childbirth, since the patterns of paid and domestic work and the importance for the partnership may be different in the first year after birth and may change when the children start school. For all parts of the analysis, I limit the sample to partnered women aged between 20 and 45 years when having their first birth, since the experience of parenthood may be different for teenagers and older women.

Dealing with missing observations

After excluding teenagers and mothers over 45 years at birth and couples who are censored after birth due to end of the survey, I can observe 619 first births. Of these, 23 drop out due to attrition and 13 due to separations in the year after birth, while 99 couples (16 percent) have item non-response in some of the explanatory variables for the whole period covered by the separation risk models. The sample of complete cases therefore is 520 couples of which 36 (7 percent) experience separations between the second and the fifth year after the first birth.

For the analysis of relationship satisfaction, the sample is considerably smaller due to the later start and the interruption of the satisfaction question, which is used for the dependent variable. Since I need one observation of relationship satisfaction before birth for the partial change models, I can only consider couples having their first child at wave 7 or later. After excluding births to teenager and mothers aged over 45 at birth and couples censored because the last survey wave took place before their third year after birth, the sample consists of 398 cases of which 27 drop out due to attrition and 22 due to separations before the third year after birth. For further 47 couples, the third year after birth was at wave 11 when the relationship question was not asked. Of the remainder, 74 couples have not responded on one or more questions used for the explanatory variables. The number of complete cases hence is 228 couples.

The majority of missing observations in this analysis derive from item non-response rather than attrition. Most of the observations with missing items are likely to be missing at random, since the BHPS provide relatively rich information on different characteristics that relate to non-response. The missing observation for satisfaction with the partner and some of the explanatory relationship history variables are missing at those waves when the relevant questions have not been asked. Other covariates with the largest numbers of missing responses include income, housework and childcare variables, men's gender attitudes and educational level. To test what other variables explain missingness in these covariates, I explored the characteristics of people who have missing responses for one or more items and find that being in the BHPS original sample starting from 1990 reduces item non-response as does women's age, being married, and men's poor health.² To test for potential bias in the results based on the complete cases, I impute the missing observations of the explanatory variables using multiple imputation through chained equations. For this, I include the significant predictors in the multiple imputation model in addition to the other regression covariates.

² I did not find any significant associations between missing responses and other frequently used predictors such as housing conditions or unemployment.

The results do not vary significantly from those for the complete cases and are reported in the appendix for the final models.

4 Measuring dependent and independent variables

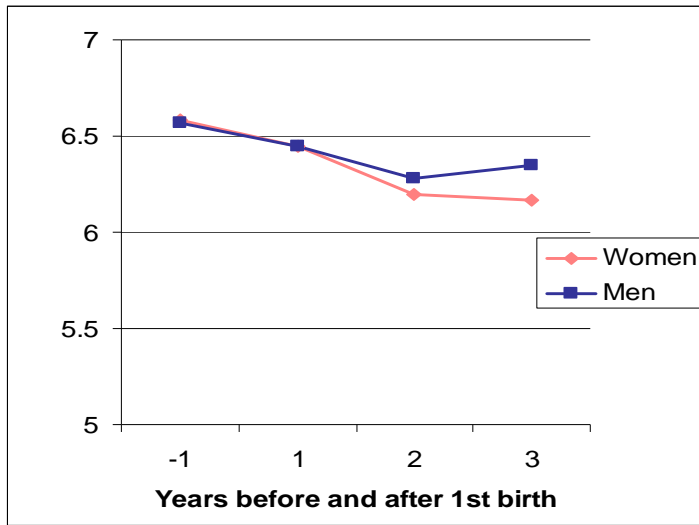
Parents' satisfaction with the partner and separation risk

The BHPS contains only one question asking how satisfied each respondent living in a couple is with his or her partner on a scale from 1 to 7, with 1 denoting "not satisfied at all" and 7 "completely satisfied". While a one-item measure is less reliable than latent variables based on several relationship aspects (Twenge, Campbell et al. 2003), the latter indicators may inflate association between marital quality and self-report measures of interpersonal processes within marriage, since the different items often include evaluations of marital quality as well as reports of specific behaviours (Bradbury, Fincham et al. 2000). Questions like this one asking for general feelings of satisfaction are prone to social desirability bias and may suffer from people's tendency towards self-denial of problems. Therefore this part of the analysis is likely to overestimate respondents' satisfaction with the partner. By accounting for the satisfaction before parenthood, however, I focus on change in the level of satisfaction with the partner since pre-birth, which should alleviate this problem. It is also important to note that the question asks about satisfaction with one's partner rather than with the relationship. This may lead to less visible reductions in satisfaction and more conservative estimates, since people who perceive relationship problems as temporary e.g. due to the life-cycle phase may not express dissatisfaction with their partner while they may have done if asked about the relationship.

The indicator on satisfaction with the partner is used as a continuous variable to take advantage of all the variation over time and across couples.³ Observing men's and women's satisfaction with the partner from the year before the first birth to three years after, one can see a slight reduction for both genders over time albeit men show a slight improvement again in the third year after birth (Chart 1). Although the reduction is small in absolute terms, it is statistically significant from year before birth to the second and third year after. As one would expect, fathers' and mothers' satisfaction with the partner in the third year after birth are strongly correlated (pearson's $r=0.35$, $\text{sig}=.000$).

³ The results are slightly less significant but do not change qualitatively if a logit is used based on a binary distinction between couples with a significant reduction in satisfaction and those where there is almost no change or an increase in satisfaction.

Chart 1: Women's and men's satisfaction with the partner from before birth to three years after



The dependent variable of separation risk is based on information of respondents' partnership status and changes therein from one year to the next. Relationship breakdown is understood as separation or divorce, while death of one partner is coded as a censored observation. Couples' dissolution is operationalised as the log of the relative risk (hazard) of separation of couple i at time t given the probability that they stayed together until that time ($\text{Log}[h_i(t)/h_0(t)]$). As can be seen in Chart 2, about 8 percent of couples separate until the fifth year after their first birth. This matches the 8 percent parental divorce risk Haskey estimated for children born in 1989 (Haskey 1997). Based on the percentage of couples rather than children, the risk of divorce would be slightly lower since some have more than one child. However, it may increase slightly when cohabiting couples with children are taken into account, whose risk of union dissolution is higher (Chan and Halpin 2005). As shown in Table 1, first order lags of men's and women's relationship satisfaction are significantly and negatively associated with couples' separation risk.

Chart 2: Proportion of couples separated in each year after birth

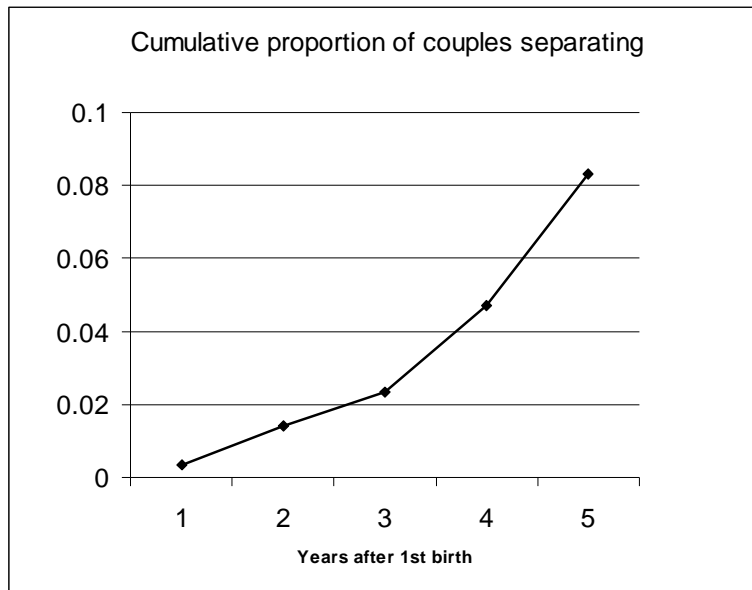


Table 1: Cox proportional hazard model of couples' separation risk between the second and fifth year after becoming parents

	<i>Coefficient (S.E.)</i>
<i>Women's relationship satisfaction</i>	-0.328*** (0.118)
<i>Men's relationship satisfaction</i>	-0.250* (0.124)
<i>No. couples (separations)</i>	635 (37)

Note: This is excluding any other controls.

Measuring the explanatory variables

Housework division and change

Housework is understood as all types of routine (e.g. cooking, washing, cleaning, grocery shopping, paying bills) and non-routine (repairs and maintenance) household work. For the empirical analysis, gender (in)equality in the division of housework is operationalised as the percentage of time women spend on housework relative to the total weekly housework time of both partners. In line with the literature, we observe that women spend on average just over 70 percent of couples' total weekly housework time (see Table A1 in the Appendix). Furthermore, women's housework share since before birth increases by about 6 percent in the second year of parenthood. Using a question on perceived fairness in the division of housework asked in wave 7, I find that among the sub-sample of couples, who had their first child between 1994 and 1996, a larger housework share for women and a bigger increase since pre-birth are significantly correlated with greater unfairness perceptions (see Table A2 in the Appendix).

Division of childcare responsibility

The BHPS collects information only on how responsibility for childcare is divided between partners.⁴ The gender gap in time spent thinking about different tasks which feeling responsible often entails has been found to be similar or slightly larger than the gap in time spent on childcare tasks itself (Lee and Waite 2005). For couples with pre-school children for whom childcare is most time consuming, responsibility may be about equal or may still underestimate women's share of actual childcare time. The mean of both partners' responses is calculated and in cases where partners disagree, I attribute responsibility to the partner who apparently is slightly more responsible. In the analysis, I only differentiate between the cases when "the mother is mainly responsible" or when "the father shares or bears more childcare responsibility" since the percentage of couples stating that the father is more responsible is with 2 percent too small to form a separate category. Based on the descriptive statistics, mothers are mainly responsible for childcare in 73 percent of the families in the second year of parenthood.

Paid and total work hours

I use women's and men's total work hours made up of market work and housework as a proxy for work-family conflict. For mothers, I also test the significance of their weekly hours in paid work separately. To test in how the exclusion of childcare time is likely to impact on the results, I examine the correlation between the total workload including childcare time and the sum of just paid and housework hours based on the UK Time Use Survey 2000. I find a strongly significant correlation of 0.75 for mothers and 0.89 for fathers with preschool children (see Table A3 in the Appendix). Overall, this hence seems like a more suitable proxy than paid work hours only, which display only a correlation of 0.45 for mothers. However, it probably overestimates the difference in total work hours between women working part-time and full-time, since the former usually spend much more time on childcare even if on average their total work hours are still slightly shorter. To provide some preliminary test of my assumption that very long total hours for women and men or mothers' paid work hours are likely to be associated with greater levels of work-family conflict while housework time is not, I examine bivariate correlations with a question on satisfaction with the amount of leisure time in the BHPS. Both market work and total work hours, show a significant negative correlation with satisfaction with the amount of leisure time for both mothers and fathers (see Table A3). By contrast, either partners' absolute housework hours are insignificant.

⁴ The question is phrased 'Who is mainly responsible for looking after the child(ren)?' and the answer options are 'mainly self', 'mainly partner', 'joint with partner' or 'someone else'.

Other covariates

I account for whether the couple goes on to have a second birth within three years after the first child and consider interactions with couples' domestic work division and total hours. About 7 and 23 percent of all couples in the sample for relationship satisfaction respectively have a second child in the second and third year after birth. Even though the effects may vary between these two groups, the first sub-sample is too small for separate interaction terms and hence these two groups are combined. While a second birth potentially could also change the effect of couples' domestic and paid work on their relationship stability, the number of separation events is too small for interaction effects to generate meaningful results and hence I just control for the number of children a couple had in this part of the analysis. In addition, I include the age of the first child in months as a time trend and measure of the child's development and diminishing care needs.

To control for couples' breadwinning arrangements, available time for care and financial situation by including normal hours of paid work spent by the partner and couples' monthly gross earnings adjusted for inflation in the models of women's and men's satisfaction with the partner. I also account for symptoms of post-natal depression by controlling for mothers' psychological distress⁵, for which I use an index derived from twelve question items designed to diagnose depression.

Using factor analysis, I calculate a gender role attitude factor based on six questions asked about gender roles in the BHPS (for exact wording see Appendix). I include this factor as a continuous variable for women as well as the difference between partners' gender attitudes. For educational attainment, I differentiate for both men and women between three levels of educational attainment: "O-levels or less", "A-levels or similar qualification" or "at least one university degree". Based on these, dummy variables representing whether both couples have the same level of education or whether the woman or the man is more educated are created. I also control for women's age at birth and partners' age difference measured as the number of years the woman is older than the man. Furthermore, I account for whether the couple was married or just cohabiting when they had their first child.

For the analysis of separation risk, I include additional controls such as the couples' relationship duration, whether one partner has previously been married and experienced a separation or divorce

⁵ Mothers' physical health status reports were also tested but not significant.

and whether the man already has a child with a previous partner⁶. I also consider whether one of the partners holds liberal values towards divorce based on a BHPS question asking whether one agrees that “it is better to divorce than continue an unhappy marriage”.⁷ I tested these variables also in the models for relationship satisfaction but they did not prove significant. They are not included in the final satisfaction models due to the small sample size for that part of the analysis, which the covariates derived from the relationship and fertility history would have reduced even further.

5 Results

In this section, I first present separate regression results for men’s and women’s satisfaction with their partner in the third year of parenthood respectively. Then I examine Cox proportional hazard models for separation risk during the early years of parenthood focussing on the same hypotheses. For all three parts of the analysis, I show associations with couples’ housework and childcare division and men’s or women’s total work hours in a first model. As a second step, I then add the other partner’s satisfaction to the models of women’s and men’s satisfaction with their partner to examine whether the effect of the explanatory variables is likely to work indirectly through their partner’s satisfaction. In the second model of the separation risk analysis, I also add lags of mothers’ and fathers’ satisfaction with their partners to the separation risk model to explore which one has a stronger effect and if some of the explanatory variables lose their significance when either partner’s satisfaction is considered.

Women’s satisfaction with their partner

Accounting for women’s pre-birth satisfaction with their partner, Model 1 in Table 3 examines the importance of women’s housework share, childcare responsibility and their total work hours for their satisfaction in the third year after the first birth. In line with the literature (Glenn and McLanahan 1982; Belsky, Spanier et al. 1983), women’s who are more satisfied before birth, also remain more satisfied three years after. Neither couples’ housework division nor the change since pre-birth is significant. I also tested interactions with women’s gender attitudes or employment status but found no difference in the effect between subgroups. Hypothesis 1 is therefore rejected.

Women with one child seem to be more satisfied with their partner when they are mainly responsible for childcare as opposed to sharing it. For couples with two children, this association is

⁶ In addition to the frequency of missing data on relationship history, this information may be particularly unreliable due to fathers giving incomplete accounts of any previous children.

⁷ I tried including housework dissonance variables for couples who did not agree on their housework division but found no effects.

negative but does not reach significance. This lends some support for Hypothesis 2 but only for couples with one child.

Regarding the importance of women's total work hours, we observe that women who have a second child within three years after the first are less satisfied if they work longer total hours as a combination of paid work and housework. The association is insignificant for mothers of one child. I also examined associations with long paid work hours, which are not significant irrespective of the number of children (Model not shown)⁸. These results hence lend support for the family-work conflict hypothesis only for mothers who also bear the additional burden of childcare for a second child. Furthermore, the combination of paid work and housework seems more important than just pressures from long hours in market work. Based on all the control variables, only having a second child and mothers' subjective well-being is positively correlated with mothers' satisfaction with their partner.

In Model 2, I include fathers' satisfaction with the partner in mothers' satisfaction regression to see whether the previously significant variable of childcare division and longer total work hours lose their importance, which would point to an indirect effect partly working through men's satisfaction. We observe that couples' childcare division is not significant anymore, while neither coefficient nor significance level changes for women's total hours for couples with two children. This may imply that mothers with one child are more satisfied when they have the main childcare responsibility at least partly because their husbands or partners are more satisfied with them.

Men's satisfaction with their partner

Model 3 in Table 3 tests the significance of couples' division of housework and childcare responsibility as well as men's total work hours for the change in fathers' satisfaction with their partner since pre-birth. As for mothers, prenatal partner satisfaction is the strongest predictor of fathers' satisfaction three years after birth. Also in line with our expectations, the division of housework is insignificant. Similar to the pattern observed for mothers, fathers with one child are more satisfied when they do not share childcare responsibility, whereas fathers in couples who have a second child within three years are more satisfied with the partner when they share childcare. While the latter association did not reach significance for mothers, it does so for fathers. As for mothers, the childcare hypothesis is hence confirmed only for fathers of one child.

⁸ Tables of the models not shown for the purpose of brevity can be obtained from the author.

Contrary to Hypothesis 3, longer total work hours of fathers do not lower their relationship satisfaction. Instead longer hours in market work for mothers reduce fathers' satisfaction with their partner and appear to be a more important factor than their own hours. Based on tests of interactions with fathers' gender attitudes (models not shown), this effect does not seem stronger among men with traditional attitudes compared to those who hold relatively egalitarian views. In contrast to the analysis for mothers, there are no significant interaction effects between men's total hours and the number of children. Furthermore, I tested whether the effect of women's paid work on the change in fathers' satisfaction could also be due to women's relative or absolute earnings as proxies for economic independence but did not find any significant association (results not displayed here).

The results for the other covariates mirror those for mothers. Men who become fathers of a second child and whose female partners score high on good subjective well-being are more satisfied with their partner. It should be noted however that the direction of these effects cannot be ascertained in this analysis, since partners who are more satisfied with each other are quite likely to have a second birth sooner than other couples.

Again I examine what happens to the significant explanatory variables when mothers' satisfaction is considered. As shown in Model 4, childcare division loses significance also for fathers, albeit not as much as it did for mothers. The negative association with mothers' paid work hours however does not change. This examination of possible cross-over effects of one's partner being more satisfied with the arrangement rather than a direct effect of childcare responsibility on one's own satisfaction with the partner hence does not provide any clear clues, since couples' division of childcare responsibly ceases to be significant in mothers' and fathers' regressions. To provide more conclusive evidence on this point, other statistical methods such as structural equation models would be required.

Table 3: Models of mothers' and fathers' relationship satisfaction three years after becoming parents

	Model 1	Model 2	Model 3	Model 4
Satisfaction with partner for	Mothers	Mothers	Fathers	Fathers
Pre-birth satisfaction with partner	0.548***	0.527***	0.560***	0.506***
Mother's housework share	0.001	-0.001	0.001	0.001
Mother's housework shareX Full-time work	0.001	0.001		
Mother main childcare responsibility	0.398*	0.297	0.336*	0.211
Childcare shared – omitted				
Mother main childcare resp.X Two children	-0.479	-.274	-0.799*	-0.198

Two children	1.227 [^]	1.07 [^]	0.642 [*]	0.723 [*]
Mother's total work hours	0.010	0.011		0.516 [*]
Mother's total work hours X Two children	-0.023 [^]	-0.023 [^]		
Mother's housework hours				
Mother's housework hours X Two children				
Mother's paid work hours			-0.010 [^]	-0.010 [*]
Mother's paid work hours X Two children				
Father's total work hours			-0.003	-0.004
Father's paid work hours	-0.006	-0.004		
Couple's gross monthly earnings	0.0001	0.0001	0.000	0.000
Both partners high education	-0.115	-0.100	0.017	-0.095
Both partners medium education	0.021	0.016	-0.067	-0.137
Both partners low education	0.090	0.087	0.057	-0.062
Man more educated than woman	0.257	0.421 [*]	-0.406 [*]	-0.516 ^{**}
Woman's gender attitudes	0.075	0.044	0.004	0.005
Difference in gender attitudes	0.183	0.048	-0.116	-0.109
Woman's age at birth	-0.012	-0.010	-0.010	-0.007
Age difference (Woman-man)	0.018	0.019	-0.008	-0.011
Married at birth	-0.140	-0.073	0.009	0.028
Woman's psychological distress	-0.068 ^{**}	-0.057 ^{**}	-0.0512 ^{**}	-0.030 [^]
Partner's satisfaction		0.291 ^{***}		0.223 ^{***}
Constant	2.394 [*]	0.605	3.169 ^{**}	2.181 [*]
Adj. R Squared	0.152	0.212	0.210	0.275
No. of couples	228	227	227	226

Note: [^] p<.10; ^{*} p<.05; ^{**} p<.01; ^{***} p<.001.

Source: Author's own calculation based on BHPS 1994-2005.

Risk of relationship breakdown

In the last part of this analysis, I examine the association between housework and childcare division, paid and total work hours and couples' separation risk during the first years of parenthood. As shown in Model 4, couples' housework division is insignificant leading us to reject Hypothesis 1. We see a positive association between mothers' main childcare responsibility and likelihood of a break-up, which is only just significant at the 10 percent level but becomes more significant after imputing some of the missing observations (see Table A5 in the Appendix). While at first this may seem like a contradiction with the finding for relationship satisfaction of fathers and mothers with only one child, who seem to be more satisfied when the mother is mainly responsible, these may be two different processes with the parent-child relationship being the main reason for couples' lower separation risk. This difference definitely seems to be more than a composition effect, since the samples contain almost equal percentages of couples with one or two children and both groups are equally likely to drop out of the survey. I also tested an interaction between couples' childcare division and the oldest child's age, since fathers are more likely to share childcare as children grow

older and this could superpose the childcare effect on dissolution risk. However, this was not significant. Hypothesis 2 for shared childcare reducing couples' separation risk therefore receives tentative support.

In line with Hypothesis 3, longer hours of women in total as a combination of paid and domestic work increase the separation risk (Model 4). To test the competing explanations, I also included women's paid work hours separately and women's relative earnings in alternative regressions, but neither of these reached significance (models not shown). Men's hours or couples' housework division are also insignificant. This is in line with our earlier findings on women's and men's satisfaction with the partner.

Furthermore, a larger difference in couples' gender attitudes with women holding more egalitarian gender attitudes than their partners increases couples' dissolution risk. Couples' separation risk also diminishes with women's age at birth and is significantly higher for couples where at least one partner separated or divorced after a previous marriage.

Finally in Model 5, I examine how the associations change when mothers' and fathers' satisfaction are included. Remarkably, women's satisfaction with their partner is significant while fathers' is not. As we would expect, the division of childcare actually becomes more significant suggesting a strong direct effect on dissolution risk irrespective of how satisfied women and men are with their partner. Women's total hours are only close to significant anymore, which points to a partial indirect effect through partners' satisfaction with each other. These results are the same when women's and men's satisfaction are included separately. Although the analysis of satisfaction with the partner is based on a sub-sample of that for relationship stability, the latter results do not change qualitatively even when they are limited to a smaller sample such as in Model 5.

Table 4: Cox proportional hazard models of couples' separation risk after becoming parents

	Model 4	Model 5
Mother's housework share	-0.008	-0.001
Mother main childcare resp.	0.792 [^]	1.102 [^]
Mother's total work hours	0.025*	0.023
Father's total work hours	0.009	0.001
No of children	-0.521	-0.831
Couple's gross monthly earnings	-0.001*	-0.001*
Both partners high or medium education –omitted ^a		

Both partners low education	0.729	0.121
Man more educated than woman	0.519	0.615
Woman more educated than man	0.728	0.697
Woman's gender attitudes	-0.417	-0.209
Difference in gender attitudes	0.690*	0.993*
Woman's age at birth	-0.113*	-0.079
Age difference (Woman-man)	0.019	-0.031
Married at birth	0.238	0.170
At least one partner holds liberal divorce attitudes	0.380	0.335
One partner experienced marital breakdown	1.833**	1.548*
Fathered child in previous relationship	0.338	0.277
Relationship duration	0.044	0.068
Age of first child in months	-0.006	-.007
Woman's psychological distress	-0.010	-0.075
Woman's satisfaction with the partner		-0.413*
Man's satisfaction with the partner		-0.124
No. of couples (couple years)	520 (1477)	467 (1086)
No of separations	36	26

Note: ^ p<.10; * p<.05; ** p<.01; *** p<.001;

^aThe two categories of medium and high educated couples are combined, as there were no separations among couples with college education.

Source: Author's own calculation based on BHPS 1994-2005.

Table A4 and A5 in the Appendix show the corresponding results for the final models after imputing part of the missing observations in the explanatory variables for mothers' and fathers' satisfaction with the partner and couples' dissolution risk. I do not impute the missing values in the women's and men's satisfaction with the partner and the housework division variable, since these do not meet the requirements of a normal distribution⁹, which can lead to distortions with the multiple imputation technique through chained equations. After omitting couples' housework division in the models, I impute more than half of the observations which are missing due to item non-response and the sample size increases to 302 and 273 couples in the analysis of mothers' and fathers' satisfaction with the partner respectively. The lower number for fathers is due to more missing values on the satisfaction question than for mothers. With most of the remaining observations being missing, since the question of relationship satisfaction has not been asked in wave 11 of the BHPS, these are hence not likely to be substantially different from the rest of the sample. We see that overall the results for the imputed sample are robust or slightly more significant for all parts of the analysis. Only the association between fathers' satisfaction with their partner and mothers' paid work hours ceases to be significant, which however does not affect the testing of the three main hypotheses.

⁹ Attempts of different transformations did not improve their distributions.

6 Interpretation

In contrast to theory and previous studies of all couples or those with older children, inequality in the division of housework between partners does not seem to reduce mothers' satisfaction with their partner and the relationship stability for British couples with young children. Hence Hypothesis 1 is rejected in full. Unfortunately, with the available data I cannot explore whether this result is due to women being less likely to perceive their increased housework share as unfair in the first years after becoming mothers or whether their unfairness evaluations are not as strongly linked to lower satisfaction as for childless women or mothers with older children. For people with small children, housework is likely to overlap to a large extent with childcare time. Mothers possibly pay less attention to and therefore underestimate their amount of housework, since they regard childcare as the primary activity, or socialisation aspects of childcare indeed compensate them for the larger amount of housework they do, as found by some scholars (DeMaris and Longmore 1996). Alternatively, Fox observed that mothers prioritise that the father spends time with the child whenever he is home to establish a good father-child relationship over greater equality in housework. These mothers also reported that doing housework while the father played with the child felt like a welcome break from baby care (Fox 2001).

Hypothesis 2 expected that women and men would be more satisfied with their partner when mothers are mainly responsible for childcare. This has been confirmed for couples with one child, whereas the association is negative for fathers' satisfaction with their partner among couples who have a second child soon after the first. This suggests that as long as couples have only one small child both partners seem to appreciate it when mothers take care of most of the childcare. There may be a number of reasons for the differential effect depending on the number of children. One explanation may be that mothers do not expect much help from men as long as they have only one small child, while this changes when they have a second one. Alternatively there may be a selection effect of some unobserved characteristics such as preferences for having children which are related to greater likelihood of having a second child and both partners wanting to share childcare.

The finding for the majority of couples with one child is in line with earlier findings, which suggested that shared childcare may increase conflict between partners (Benin and Agostinelli 1988), probably since they require more negotiations than traditional arrangements. If these results are considered in a wider social context, they may also point to social norms of intensive mothering and family networks still being more supportive of relatively traditional gender arrangements in

childcare for young children, which would correspond to Thompson and Walker's evaluations (Thompson and Walker 1989).

The positive correlation between fathers' shared childcare responsibility and their satisfaction with the partner for couples with two children could be interpreted as an indication of change with some couples preferring more equal arrangements and being willing to challenge traditional norms and ideals. The positive association between shared childcare responsibility and relationship stability also provides evidence of changing family and gender arrangements. In line with Hypothesis 2, British couples with small children who share childcare indeed are now significantly less likely to separate than those where the mother is mainly responsible for the child(ren). This is consistent with the marital dependency perspective and empirical research on Dutch couples with older children (England and Farkas 1986; Kalmijn 1999).

Hypothesis 3 proposed that longer total hours as a combination of paid work and housework should be negatively associated with relationship satisfaction and stability for mothers and fathers. This is rejected for mothers with one child, while it cannot be rejected for mothers who have a second birth within three years after the first. The stronger effect for women with more than one child is not surprising given the additional care demands that a second birth implies. For fathers' satisfaction with their partner in the third year after birth, women's paid work hours are a more important predictor than their own workload does not. Hypothesis 3 is therefore rejected for fathers. Mothers' longer total hours also reduce relationship stability among this sample of couples with children aged under five years, which is consistent with the hypothesis. Overall, this provides very limited support for work-family conflict.

7 Limitations and conclusion

Among couples with one three-year old child, mothers' and fathers seem to be more satisfied with their partner when the mother takes the main responsibility for childcare, whereas there is evidence that the association reverses for fathers among couples who have two children by that time. Shared childcare also reduces the risk of relationship breakdown. A larger total workload for women as a combination of paid work and housework reduces mothers' satisfaction for those with two children and increases couples' dissolution risk during the first five years of parenthood.

These results are largely suggestive due to the relatively small samples and the fairly low rate of separations. While I carried out exploratory tests of interactions with the number of children,

women's paid work status and gender attitudes, the limited sample size makes it very difficult to identify significant patterns between sub-groups. The associations identified especially with second births should be interpreted with care, as they may represent selection effects or indirect mechanisms which are impossible to explore given the available data. A larger sample size would allow a more thorough investigation by differentiating the groups of couples with one and two children further based on the birth interval as well as other characteristics to identify the reasons underlying this interaction effect.

Our ability to draw definitive conclusion is also strongly limited by the availability of measures for satisfaction with the partner, childcare and work-family conflict. Since the former asks only about satisfaction with one's partner rather than with different aspects of the relationship and is based on just one item, it is likely to underestimate the variation in how much both partners' satisfaction changes during the transition to parenthood. Although this measure has the advantage of generating conservative estimates, future research ideally should use more diverse measures of relationship quality that cover a wider range of sub-categories of this concept such as conflict frequency and behaviour or separate evaluations of positive and negative relationship aspects (Fincham and Linfield 1997; Bradbury, Fincham et al. 2000).

Based on my results, couples' childcare division seems to be a more important aspect for relationship quality than previously assumed. However, more detailed information on both partners' time spent on different childcare tasks, breastfeeding patterns after birth and how much of childcare is outsourced to informal networks such as grandmothers or professional day-care would improve our understanding of possible reasons underlying this finding especially regarding the significant interaction effect with second children or the small birth interval. Each partner's paid work hours plus housework time as the main measures for work-family conflict are suboptimal, since this excludes childcare time which makes up a large part among parents with young children. Furthermore, subjective measures of perceived stress, time pressures and spill-over effects from work to home or reverse would be needed to investigate to what extent it is the actual numbers of hours worked or certain combinations of worker and carer roles that contribute to work-family conflict. In addition, another promising route for future research would be to examine the importance of job characteristics such as flexible work hours, shift work, job autonomy, which are likely to impact on work-family conflict and relationship quality.

This study provides the first investigation of British couples' relationship quality when they have pre-school children and the association with the division of housework, childcare and both partners' workload. The findings suggest differences in the effects of housework division from those found among samples of all couples or those with older dependent children. The positive association of mothers' childcare responsibility and mothers' and fathers' satisfaction with their partner points to persistence of relatively traditional parenthood expectations among the large group of couples with one child. By contrast, the positive correlation between shared childcare responsibility and fathers' partner satisfaction among couples with two children and with relationship stability in general may be interpreted as sign of more egalitarian parenting preferences. This research contributes to the evidence base of the academic and political debate on support for different family arrangements such as the dual full-time worker family model and how that interrelates with gender roles in the home and family outcomes in terms of relationship quality.

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9 Appendix

Table A1: Descriptive statistics

Descriptives at second year after birth:	Analysis of change in satisfaction with partner		Analysis of separation risk	
	Mean/Percentage	Std Dev.	Mean/Percentage	Standard
Woman's satisfaction with the partner ^a	6.20	1.06	6.19	1.05
Man's satisfaction with the partner ^a	6.35	.97	6.35	.91
Woman's pre-birth partner satisfaction	6.62	.72		
Man's pre-birth partner satisfaction	6.58	.76		
Woman's total housework time	14.67	8.29	15.58	8.86
Husband's total housework time	5.39	4.41	5.30	4.71
Woman's housework share	71.93	19.71	73.57	19.41
Increase in women's housework share since pre-birth	5.42	20.41	6.66	19.37
Woman more responsible for childcare	72.49		72.65	
Childcare shared or father more responsible	27.51		27.35	
Couple has 2 nd child in year 2 or 3 after first child	29.51		29.02	
Woman's paid work hours	20.11	15.24	19.45	16.23
Man's paid work hours	42.02	15.94	42.46	16.24
Woman's total hours	34.69	14.25	35.09	14.77
Husband's total hours	47.39	15.13	47.73	15.64
Wives' gender role factor	3.26	.61	3.25	.65
Gender attitude difference (woman more egalitarian)	.02	6.22	.01	.64
At least one partner holds liberal divorce attitudes	84.39		83.64	
both partners low education	10.82		13.83	
both partners medium education	23.93		24.49	
both partners high education	15.74		12.93	
Man more educated than woman	23.18		26.95	
Woman more educated than man	23.18		20.09	
Couples' monthly gross earnings in GBP (RPI adj.)	2145.23	1150.6	2091.51	1284.7
One or both partners previous marriage breakdown	7.54		7.94	
Married at time of birth	20.00		19.50	
Man has a child with previous partner	6.23		6.12	
Woman's age at birth	30.49	6.11	30.32	6.66
Partners' age difference (women-man)	-2.13	4.67	-2.21	4.41
Relationship duration	7.38	4.84	7.42	4.96
Woman's psychological distress	2.17	3.17	2.19	3.06

Source: Author's own calculation based on BHPS 1994-2005.

Table A2: Bivariate correlation of mothers' and fathers' work hours and total hours and satisfaction with the amount of leisure time in the second year after birth

	<i>Is the allocation of housework unfair?</i>
<i>Mothers' housework share</i>	0.3248*
<i>Significance (N=60)</i>	.0107
<i>Increase in mothers' housework share since pre-birth</i>	0.2194^
<i>Significance (N=60)</i>	0.0921

Note: ^ p<.10; * p<.05; ** p<.01; *** p<.001.

Source: Author's own calculation based on BHPS 1994-2005.

Table A3: Bivariate correlation coefficients of mothers' and fathers' total work hours including and excluding childcare time

	<i>Mothers' total hours incl. childcare</i>		<i>Fathers' total hours incl. childcare</i>
<i>Mothers' total hours excl. childcare</i>	0.75	<i>Fathers' total hours excl. childcare</i>	0.89
<i>Significance (N=1445)</i>	0.000	<i>Significance (N=1173)</i>	0.000
<i>Mothers' paid work hours</i>	0.45	<i>Fathers' paid work hours</i>	0.76
<i>Significance (N=1445)</i>	0.000	<i>Significance (N=1173)</i>	0.000

Source: Author's own calculation based on UK Time Use Survey 2000.

Table A4: Bivariate correlation of mothers' and fathers' work hours and total hours and satisfaction with the amount of leisure time in the second year after birth

	<i>Satisfaction with amount of leisure time</i>
<i>Mothers' total hours</i>	-0.1435***
<i>Significance (N=276)</i>	.005
<i>Mothers' paid work hours</i>	-0.1475***
<i>Significance (N=379)</i>	.004
<i>Mothers' housework hours</i>	0.004
<i>Significance (N=376)</i>	0.938
<i>Fathers' total hours</i>	-0.1795***
<i>Significance (N=340)</i>	.0000
<i>Fathers' paid work hours</i>	-0.1653***
<i>Significance (N=341)</i>	.002
<i>Fathers' housework hours</i>	-0.0226
<i>Significance (N=345)</i>	0.6758

Note: ^ p<.10; * p<.05; ** p<.01; *** p<.001.

Source: Author's own calculation based on BHPS 1994-2005.

Gender role attitudes questions

The gender attitude factor is based on the following six BHPS self-completion questions:

1. Do you personally agree or disagree ...A pre school child is likely to suffer if his or her mother works.
2. Do you personally agree or disagree ...All in all, family life suffers when the woman has a full time job

3. Do you personally agree or disagreeA husband's jobs is to earn money; a wife's job is to look after the home and family
4. Do you personally agree or disagree ...A woman and her family would all be happier if she goes out to work
5. Do you personally agree or disagree ...Both the husband and wife should contribute to the household income
6. Do you personally agree or disagree ...Having a fulltime job is the best way for a woman to be an independent person

Table A4: Models of mothers' and fathers' satisfaction with the partner after multiple imputation of missing observations

Table 3: Models of mothers' and fathers' relationship satisfaction three years after becoming parents

	Model 1	Model 2	Model 3	Model 4
Satisfaction with partner for	Mothers	Mothers	Fathers	Fathers
Pre-birth satisfaction with partner	0.476***	0.461***	0.521**	0.455***
Childcare shared - omitted				
Mother main childcare responsibility	0.307^	0.213	0.315*	0.200
Mother main childcare resp.X Two children	-0.371	-.218	-0.513^	-0.502^
Two children	1.063*	0.933^	0.373	0.316
Mother's total work hours	0.007	0.009		
Mother's total work hoursX Two children	-0.021*	-0.021*		
Mother's paid work hours			-0.006	-0.007
Father's total work hours			-0.005	-0.006^
Father's paid work hours	-0.001	-0.004		
Couple's gross monthly earnings	0.0001	0.0001	-0.000	0.000
Both partners high education	-0.107	-0.101	0.038	-0.092
Both partners medium education	-0.051	0.019	-0.039	-0.111
Both partners low education	0.087	0.099	0.023	-0.091
Man more educated than woman	0.152	0.283	-0.299^	-0.409**
Woman's gender attitudes	-0.012	0.031	0.025	0.002
Difference in gender attitudes	0.043	0.072	-0.091	-0.083
Woman's age at birth	-0.003	-0.001	-0.008	-0.008
Age difference (Woman-man)	0.024^	0.023^	-0.006	-0.015
Married at birth	-0.082	-0.013	0.022	0.028
Woman's psychological distress	-0.073***	-0.060**	-0.060**	-0.039*
Partner's satisfaction		0.300***		0.220***
Constant	2.737**	0.669	3.575***	2.738***
No. of couples	302	273	273	273
Imputation cycles	10	10	10	10

Note: ^ p<.10; * p<.05; ** p<.01; *** p<.001.

Sample origin, wave, and men's physical health status were used as additional predictors of item non-response in the chained equations imputations model. Mothers' housework share was omitted to increase the sample size, since the imputations would have been inaccurate and as it was not significant at all.

Source: Author's own calculation based on BHPS 1994-2005.

Table A5: Cox proportional hazard models of couples' separation risk after multiple imputation of missing observations

	Model 5	Model 6
Shared childcare responsibility-omitted		
Mother main childcare resp.	0.843*	1.002*
Mother's total work hours	0.019^	0.014
Father's total work hours	0.007	0.002
No of children	-1.02**	-1.236*
Age of first child in months	-0.004	-0.014
Couple's gross monthly earnings	-0.0005*	-0.0004*
Both partners high or medium education –omitted		
Both partners low education	0.792	0.696
Man more educated than woman	0.582	0.710
Woman more educated than man	0.647	0.736
Woman's egalitarian gender attitudes	-0.293	-0.148
Difference in gender attitudes	0.409	0.610^
Woman's age	-0.129**	-0.092
Age difference (Woman-man)	0.011	-0.028
Married at birth	0.250	0.187
Liberal divorce attitudes	0.516	0.910
One partner experienced marital breakdown	1.974***	1.852**
Fathered child in previous relationship	0.035	0.067
Relationship duration	0.053	0.084
Woman's psychological distress	0.038	-0.005
Woman's satisfaction with partner		-0.401**
Man's satisfaction with partner		-0.164
No. of couples	583	394
Imputation cycles	10	10

Note: Sample origin, wave, and men's physical health status were used as additional predictors of item non-response in the chained equations imputations model. Mothers' housework share was omitted to increase the sample size, since it was not significant at all and could not be imputed properly.

^ p<.10; * p<.05; ** p<.01; *** p<.001.

Source: Author's own calculation based on BHPS 1994-2005.