

His and her relationship quality: Effects on childbearing

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Abstract

This study examines the influence of partner relationship quality on childbearing. We are innovative in using relationship quality reports from both partners, drawing on the first and second wave of the Netherlands Kinship Panel Study. This enables us to investigate what happens when partners have disagreeing perceptions of the relationship. A second focus is on the direction of the effect of relationship quality on fertility. We pose a new hypothesis, predicting that medium level relationship quality results in the highest rates of childbearing. Our results indicate that only women's perceptions of relationship quality influence the likelihood of a first birth, whereas women's and men's perceptions affect second births. We do not find unique effects of disagreeing perceptions of relationship quality; each partner's perceptions have an independent effect. Women with medium levels of relationship quality are most likely to have a(nother) child, whereas the effect of man's relationship quality is positive.

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INTRODUCTION

Many fertility studies examined the influence of individual characteristics, mostly women's, on the timing and quantum of childbearing. Most children, however, are born within couple relationships. To understand childbearing, a couple perspective is therefore most appropriate. The decision to have a child is a crucial decision that involves commitment to the child and the partner and therefore compels couples to judge their current and future circumstances on several domains, including the partnership (Hobcraft & Kiernan, 1995).

Over the past decades, increasing attention has been paid to the influence of childbearing desires and other characteristics of both partners and to couple characteristics (e.g., Coombs & Chang, 1981; Corijn, Liefbroer, & De Jong-Gierveld, 1996; Jansen & Liefbroer, 2006; Morgan, 1985; Thomson, 1997, 2002; Thomson & Hoem, 1998; Thomson, McDonald, & Bumpass, 1990). Much less attention has been paid to the influence on fertility of the quality of the partner relationship itself.

Research on the relationship between partnership quality and childbearing usually focuses on one aspect of relationship quality, namely union stability. Most such studies did not directly measure relationship stability but estimated its effects by observing subsequent separations (Koo & Janowitz, 1983; Lillard & Waite, 1993; Thomson & Henz, 2005; Thornton, 1978). Because it is the couple's separation that was observed, these studies implicitly took a couple point of view. Two studies observed relationship quality directly, but only from one partner's point of view (Myers, 1997; Rijken & Liefbroer, 2009). Men's and women's relationship satisfaction might have different determinants (Doorten, 2008) though, and the same relationship may be experienced by each partner in a different way (Bernard, 1972; Thomson & Colella, 1992). In this study we aim to answer the question how each partners' (men's and women's) perceptions of the quality of their relationship influence fertility.

In doing so, we expand on previous research in several ways. First, using both partners' reports of relationship quality enables us to test whether disagreeing perceptions of relationship quality inhibit childbearing and whether men's and women's perceptions have an equally strong influence on fertility. We also expand the hypothesis developed by Rijken and Liefbroer (2009, see chapter 3) that couples with moderately happy relationships are the most likely to have children. Using one partner's perspective, Rijken and Liefbroer (2009) found that negative partner interaction negatively influenced the likelihood of first as well as higher order parity births, and that positive partners interaction also had a negative effect, suggesting that the most positive relationships – those with low negative interaction and high positive

interaction – would be *less* likely to produce births than those with low negative interaction and low positive interaction. Third, we use a different dataset, including different measures of relationship quality than Rijken and Liefbroer (2009). We take advantage of new data from Wave 1 (2003) and Wave 2 (2007) of the Netherlands Kinship Panel Study. These data provide not only couple reports on relationship quality, but also a broad set of measures of relationship quality.

THEORY AND PREVIOUS RESEARCH

Relationship Quality and Fertility

The decision to have a child is one of the most complex lifetime judgements that individuals and couples make. Childbearing is irreversible and involves sustained commitment to support the child for a long time. The choice to have a child thus involves the couple in assessing current and likely future circumstances on several domains, including the partnership (Hobcraft & Kiernan, 1995). Hobcraft and Kiernan (1995) argued that being in a stable partnership is the most important condition for becoming a parent. Three Eurobarometer surveys from the 1990s and 2000s showed that young inhabitants of the European Union rate having a stable partnership or a supportive partner as the most or second most important factor influencing decisions about having children (European Commission, 1997; Malpas & Lambert, 1993; Testa, 2006).

Lillard and Waite (1993) argued that children represent the largest investment in marriage and that, therefore, couples who face a high likelihood of separation, may delay or forgo making this commitment. The presence of children (especially young children) raises the costs of dissolution and Lillard and Waite (1993) assumed that people take these costs into account in childbearing decision-making. Separation could imply either having to raise the children alone, or to have reduced or no contact with the children. Besides the increased cost of separation for parents, parental separation and growing up with a single parent are known to have negative effects on the child (Amato & Keith, 1991; Furstenberg & Cherlin, 1991; Morrison & Coiro, 1999).

Several studies empirically supported the idea that union instability decreases the likelihood of childbearing. Thornton (1978) found that married women had reduced rates of childbearing during the 2 years just before separation. Koo and Janowitz (1983) tried to disentangle the effects of childbearing on marital discord (indicated by actual separation) and vice versa by applying a simultaneous logit model. They conducted separate analyses for different marriage intervals, and found that marital discord does not have a statistically

significant effect on fertility until later in marriage. Conjugal discord only increases the likelihood that couples had a(nother) child if these marriages last more than 12 years. Lillard and Waite (1993) modelled the hazard of union disruption and the hazard of marital conception simultaneously, and included the estimated hazard of disruption as a predictor in the equation to estimate the hazard of marital conception. Their findings indicated that the risk of marital disruption faced by a married woman has a negative effect on her likelihood of marital childbearing: It lengthens the intervals between births and decreases the chances that a child will be born. Myers (1997) used direct measures of divorce proneness and also found that divorce proneness negatively influences childbearing.

Whereas stability is critical in decision-making about having children, the quality of a partnership may also be of concern in decisions about childbearing, even if the partners consider their union to be stable (Rijken & Liefbroer, 2009). Not only divorce negatively affects children, several studies have shown that parental conflict is detrimental to children's well-being (Amato, Loomis, & Booth, 1995; Grych & Fincham, 1990; Morrison & Coiro, 1999). Childless people who do not (yet) consider the quality of their partner relationship to be suitable for childbearing might still rather stay in a relationship than be alone. Moreover, parents in mediocre or bad quality relationships might not consider a break up because of the child(ren) they already share, but their poor relationship quality might inhibit additional births.

Another source of associations between relationship quality and childbearing is the potential negative effect of children on partner relationships (Glenn & McLanahan, 1982; Houseknecht, 1979). Studies of reasons for and against having children or additional children found that some individuals express concerns about negative effects on the partner relationship (Callan, 1986; Carmichael & Whittaker, 2007) or expect that having a (next) child will result in spending less time with their partner (Bulatoa, 1981). Carmichael and Whittaker (2007) suggested on the basis of their qualitative study that people only want to have a child in a relationship that is good enough to withstand the negative consequences of having children.

On the other hand, couples with low or moderate levels of happiness and satisfaction in their relationship may have children in order to provide alternative sources or "objects" of love and companionship or to increase the quality of the relationship itself. Research on expected consequences of having children showed that people consider emotional satisfaction and fulfillment, and giving and receiving love and affection as important benefits of having children (Bulatao, 1981; Callan, 1986; Hoffman & Manis, 1979; Secombe, 1991), but also

that people expect that having a first or another child will benefit the partner relationship (Bulatao 1981; Callan 1986; Hoffman & Manis 1979; Liefbroer, 2005).

Friedman, Hechter, and Kanazawa (1994) postulated that the value of having children in affluent societies, where children's net instrumental value is negative, lies in uncertainty reduction. Their theory assumes that rational actors will always seek to reduce uncertainty, among others by enhancing their marital solidarity. Having children is supposed to enhance marital solidarity, because it increases marital capital (Becker, Landes, & Michael, 1977). Consequently Friedman et al. derived the hypothesis that the risk of divorce has a positive effect on the propensity to parenthood. They also expected that the multistranded quality of the relationship – financial ties, ties of common interest – between husbands and wives has a negative effect on the propensity to parenthood, because partners who are already very involved with each other have less need to revert to having children as a strategy to cement the relationship.

The combination of these opposing theoretical forces could result in couples with medium levels of relationship quality having the highest birth rates. On the one hand people might avoid childbearing in very poor relationships, on the other hand people in very happy relationships may feel less need to increase the quality of their relationship or to have another source of love than people in moderately happy relationships. As noted above, Rijken and Liefbroer (2009) found that individuals with low negative interaction with their partner *and* those with high positive interaction were less likely to have (additional) children than those with low negative and those with low positive partner interaction; the highest rates of childbearing seemed to occur among couples with relationships that were basically sound but not of the highest quality. Rijken and Liefbroer (2009) suggested that these couples may want to revitalize their relationship by having a(nother) child, but also that very happy couples delay or even avoid childbearing in order to maintain the quality of their relationship. As we mentioned above, several studies have demonstrated that some people might have concerns about the negative effects of children on partner relationships, and people who are very satisfied with their current relationship might be most aware of this threat.

The theoretical ideas and empirical findings outlined above lead us to consider all three alternative hypotheses about the nature relationship between partner relationship quality and childbearing (in contrast to the null hypothesis of no effect):

H1a) Partner relationship quality has a positive effect on the likelihood of childbearing.

H1b) Partner relationship quality has a negative effect on the likelihood of childbearing.

H1c) Partner relationship quality has a curvilinear effect on the likelihood of childbearing: Medium levels of relationship quality lead to the highest likelihood of childbearing.

His and Her Relationship Quality

As noted earlier, most studies on relationship stability and childbearing did not directly measure relationship quality (Koo & Janowitz, 1983; Lillard & Waite, 1993; Thornton, 1978), though they implicitly took a couple point of view. Studies with direct measures of relationship quality have to date used only one partner's report of quality or stability (Myers, 1997; Rijken & Liefbroer, 2009). How will each partner's view of the quality of their relationship influence childbearing if these views differ?

First, we consider whether men's and women's perception of relationship quality have equally strong effects on childbearing. Differences could arise from differences between men and women in the effects of perceived relationship quality on their childbearing preferences (or intentions), or from different influence of male and female partners' preferences on having a child. In the first instance, relationship quality may be a more important factor for women in the decision to have a child because they are usually more engaged with childrearing, and may therefore be more concerned than men about effects of relationship quality and stability on the well-being of their children. Women are also most likely to end up with sole responsibility for childrearing after separation and may therefore wish to avoid raising (even more) children alone.

Men, however, also have much to lose if a relationship ends with more rather than fewer children. Men need the relationship with their partner to fully engage in fatherhood, precisely because women are most likely to care for the children after separation. Starting from this idea, Goldscheider, Webster and Kaufman (2000) hypothesized and confirmed that men who are relatively committed to parenthood as a central adult role, are more disapproving of divorce than women who are equally committed to parenthood. Schoen, Kim, Nathanson, Fields, and Astone (1997) found that satisfaction with marriage had stronger influence on men's than on women's childbearing intentions. Seccombe (1991), however, did not find any gender differences among childless men and women when they were asked to rate the importance of concerns about the stability of the partnership in deciding about having a child.

Note that gender differences could occur regardless of the nature of the relationship quality effects (positive, negative or curvilinear). For example, women might be more willing to avoid childbearing in very happy relationships, because they may be more aware of the negative consequences of having children; that is, women may be more realistic about the

need to share time and energy with children and partners. On the other hand, because the bond between women and young children is usually very strong, men might be afraid to become an outsider in the mother-child relationship, and fear that their partners will devote most of their love to the new child.

If relationship quality is equally important to men and women as a basis for having (more) children – i.e. if the effect of relationship quality on childbearing preferences is the same for men and women – differences in the influence of partners' childbearing preferences could produce differences in effects of men's and women's quality perceptions on births. Women's preferences may matter more because of their greater role in childrearing or because they incur the costs of pregnancy and childbirth. This is referred to as the "sphere-of-influence argument" (Jansen & Liefbroer, 2006; Thomson, 1997; Thomson & Hoem, 1998). If on the other hand, men remain more powerful than women in family decisions, their preferences, and thus their perceptions of the relationship, may be the more influential in decisions to have children. The idea that men win most disagreements with their partners is referred to as the "patriarchal rule" (Jansen & Liefbroer, 2006) and is based on the assumption that men are usually the ones with the most resources within a relationship.

Hence, we find theoretical or empirical support for the two possible alternatives to the null hypothesis of equal influence of men's and women's perceptions of relationship quality:

H2a) Women's perceptions of relationship quality have stronger effects on childbearing than men's perceptions.

H2b) Men's perceptions of relationship quality have stronger effects on childbearing than women's perceptions.

Finally, partners may feel that childbearing decisions require mutual agreement. We expect that births are especially likely when both partners value the relationship in the way that is most conducive to childbearing. Hence, if relationship quality is positively associated with childbearing, either partner's low assessment of the quality of the relationship can inhibit childbearing. In case of a negative or curvilinear relationship, either's high assessment could (also) inhibit childbearing. Again, there are two mechanisms that could explain such an effect. First, partners might be aware of each other's perception of the relationship, even if these perceptions diverge, and take them into account in the formation of their childbearing preferences. Thus, if either partner assesses the quality of the relationship as low, neither partner will want a child (assuming a positive or curvilinear effect of relationship quality on childbearing preferences).

Alternatively, each partner's perception of the relationship might influence only his or her own desire for children, perhaps because people are not aware of their partner's (diverging) perception of the relationship. Then the disagreement in those desires for children produces the combined effects of relationship quality. On the basis of the "principle of veto power", which implies that each partner who is unwilling to have a child can inhibit childbearing (Thomson & Hoem, 1998), we predict that when either partner's perceived quality produces low desires for children, childbearing is unlikely. A different, but related argument is the the principle of inertia (Davidson & Beach, 1981). Inertia inhibits change of behavior (concerted action) when couples disagree. When the ongoing behavior is using contraception to prevent or delay births, agreement about having a child is required to change the behavior and achieve a birth. Hence, veto power and inertia produce the same outcome in a context of practically universal contraception.

Thus, our third hypothesis is:

- H3) The partner's perception of the relationship quality that is least favorable for having a child has a dominant influence on childbearing.

METHOD

Data

The data used in this study are from Waves 1 (2002 – 2003) and 2 (2007) of the Netherlands Kinship Panel Study, a large-scale survey of Dutch men and women aged 18 – 79 at Wave 1 (Dykstra et al., 2005, 2007). Respondents were selected from a random address sample of private households in the Netherlands. The data were collected using a combination of computer-assisted personal interviews and self-administered questionnaires. In Wave 1 8,156 primary respondents participated, resulting in a response rate of 45%, comparable to that of other large-scale surveys in the Netherlands (Dykstra et al., 2005). Response rates in the Netherlands are generally lower than in other countries (De Leeuw & De Heer, 2001). In Wave 2, 74% of the respondents of Wave 1 participated.

Questionnaires were also completed by the partners of the primary respondents. We selected heterosexual couples, who were cohabiting or married at Wave 1, with no children from prior partners and of which the female partner was not pregnant and not older than 40 at Wave 1. The primary respondent also had to participate in Wave 2, so that information on the couples' birth history between Wave 1 and Wave 2 is available. Couples in which one or both of the partners already had children from a prior partner, were excluded because childbearing decisions in stepfamilies are influenced by childbearing that occurred before the union (e.g.,

Thomson et al., 2002; Vikat, Thomson, & Hoem, 1999). We focus on first and second births because third and higher order births are relatively uncommon. Our restrictions result in a sample of 683 couples, of which 418 were childless and 256 had one child at Wave 1.

Variables

Childbirth. The dependent variable in this study is the likelihood that a couple had a child between Waves 1 and 2 or that the woman was pregnant at Wave 2. First and second births are distinguished. Birth and partner histories since Wave 1 are reported by the primary respondent in Wave 2. Hence, if the couple separated between Wave 1 and Wave 2 it is still known whether the couple had a child together.

Partner relationship quality. Our independent variable of interest is the quality of the partner relationship, as perceived by each partner. Relationship quality is measured by 13 items on the degree of partner support and partner conflict and on overall partner relationship quality. Regarding support, the respondents were asked to what extent their partner supports them on the following domains: “In decisions about your work or education”, “When you have worries or health problems”, “In your leisure time activities and social contacts”, “With all kinds of practical things you need to do”, and “In personal matters that are on your mind”. Response options ranged on a 4-point scale from *no support* to *a lot of support*. The degree of partner conflict is measured by asking the respondents to indicate how often the following situations had occurred in the past 12 months: “Heated discussions between you and your partner”, “One of you putting down and blaming the other”, “You didn’t want to talk to each other for a while”, and “Arguments got out of hand”. Response options were: 1 = *not at all*, 2 = *occasionally* and 3 = *several times*. Overall relationship quality was measured by level of agreement with the items “We have a good relationship”, “The relationship with my partner makes me happy”, “Our relationship is strong”, and “The relationship with my partner is very stable”. Answers were coded on a 5-point scale ranging from *strongly agree* to *strongly disagree*.

An exploratory factor analysis of the responses of primary respondents demonstrated one strong main factor on which all of the responses loaded. Loadings on the other two factors suggest that they are methods factors linked by the common response options for the subsets of items on support, conflict and overall partner relationship quality. We also estimated separated factor models for women and for men – including primary respondents and partners – with similar results. To be able to combine all these items into one scale of relationship

quality, the items were recoded into a scale ranging from 1 to 5, 5 representing the most positive responses. Thus, responses to the questions on support were coded as 1, 2.33, 3.67 and 5; responses to conflict questions were coded as 1, 3 and 5; and responses on overall relationship quality were reverse recoded. The α of the 13-item scale is .87 for our sample of respondents, almost identical to the estimate for the entire sample of cohabiting and married primary respondents

In order to test the hypothesis of a curvilinear relationship between relationship quality and childbearing (Hypothesis 1c), as well as a hypothesis about unique effects of couple disagreement (Hypothesis 3), we identified cut-points on the scale that divided the primary respondents into thirds, reporting high, medium and low relationship quality. Cut-points were very similar for male and female primary respondents, so we used common cut-points for both genders and for partners, lying between the original one third cut-points for men and women. Low relationship quality includes scores from 1 to 4.14, high relationship quality ranges from 4.58 to 5. These values demonstrate that observed relationship quality is highly skewed towards low-quality relationships. This skewness is consistent with the fact that higher quality and more stable relationships are disproportionately represented in any cross-sectional sample. (We also estimated models in which the curvilinear association was specified in terms of a linear and squared term. The results of this specification mirrored those of the categorical specification. Because the categorical specification is easier to interpret we present those results here.)

Control variables. We included several characteristics of the couples that might produce a spurious association or suppress an association between relationship quality and fertility. First, woman's age and woman's age squared are included, as well as two dummies on the age difference between the partners – one indicating whether the man is more than 5 years older, the other indicating whether the man is more than 2 years younger. Educational status is included by woman's highest educational attainment and two dummies indicating whether the man is better or less well educated than the woman. Woman's highest educational attainment is measured on a scale ranging from 1 (*primary school not finished*) to 10 (*postdoctoral degree*) but educational differences between partners are determined by differences across only three levels (compulsory, secondary, tertiary). We also included the couple's employment hours. Each partner was asked about number of actual working hours per week. If information provided by the partner is missing, we used information provided by the primary respondent about the partner. We distinguished the four most prevalent combinations

and a residual category: (a) man full-time employed (36 hours or more per week), woman not employed; (b) man full-time employed, woman employed short part-time (1–23 hours per week); (c) man working full-time, woman employed long part-time (24–35 hours per week); (d) both full-time employed; and (e) other.

In addition, two structural aspects of the relationship were included as control variables: union status (cohabiting or married), and the duration in years of the relationship at Wave 1. Finally, because the duration of the observation – during which the couple is at risk of having a child – varies, we included this variable, measured as months between Interview 1 and Interview 2 divided by 12. If the couple did not have a child in between waves, but the woman was pregnant at Wave 2, we extended the duration of the observation by 4 months. In the models for the likelihood of a second birth, we also included the age of the first child.

Method of Analysis

We estimated logistic regression models of the probability of having a first child and of having a second child between the interviews of Wave 1 and Wave 2. We conducted logistic regression analyses rather than hazard regression analyses because we have only annual birth data and the period between Wave 1 and 2 is only 3.5 years. We explicitly included in the analyses couples who separated between interviews in the analyses. Separation can be viewed as one of the pathways from partner relationship quality to childbearing outcomes. Among couples who were childless at the first interview 9.6% separated, among couples with one child 6.0% separated. Only 5 couples who had a child between Waves 1 and 2 also experienced separation in that period. Our analyses were conducted with unweighted data and with data weighted for small discrepancies between distributions of sample characteristics and those of the Dutch population. The weights also adjusted for the fact that the sample was based on randomly selected households rather than randomly selected individuals. Because our unit of analysis is the couple – and because almost no households include more than one couple – this adjustment should not affect our estimates. Weighted and unweighted analyses produced essentially the same results, so we present unweighted estimates.

To maximize statistical power for estimates between control variables and birth, we included in the analyses couples without reports of relationship quality. Most of the missing reports result from partners not participating in the Wave 1 interview (19.5% of our sample); only 4.2% of the primary respondents in our sample did not fill out the self-completion questionnaire in which the relationship quality items are asked. This strategy results in a no

response category on relationship quality, in addition to the three categories for valid responses: low, medium and high.

We estimated models of the effects of relationship quality separately for couples without children and with one child at Wave 1. Relationship quality at Wave 1 might be more relevant for the decision to have a second child than for the decision to have a first child in the subsequent years, because of birth spacing. If a couple is going to have a second child, this will probably be within a few years after the birth of the first child, hence this is likely to happen within the period between Waves 1 and 2 or not at all. Childless people however, might consider their relationship as very good or otherwise suitable for having children, but still postpone their first child beyond Wave 2 for other reasons

We specify relationship quality in four ways to test the relative effects of women's and men's reports and their possible interaction. We estimated models with: woman's relationship quality (Model 1), man's relationship quality (Model 2), woman's and man's relationship quality (additive) (Model 3), and the interaction term of woman's and man's relationship quality (Model 4), which includes unique effects of disagreeing perceptions of the quality of the relationship. The models with woman's relationship quality only (Model 1) and with man's relationship quality only (Model 2) are nested in the additive model (Model 3), and the additive model is nested in the interaction model (Model 4). We tested whether including more extensive specifications of relationship quality improved the fit of the models. When we compared the fit of Model 3 to that of Models 1 and 2, we wanted to test only the effect of adding the other's partner's reported relationship quality, and not the effect of adding the no response category for the partner. Therefore, in Models 1 and 2, we included a dummy on whether or not the other partner's response is missing. The fit of the interaction model (Model 4) is tested on the subset of couples for whom we observed both partners' quality, excluding those for whom either partner's quality is missing

RESULTS

Descriptives

Table 1 shows the distribution of couples in terms of man's and woman's perception of relationship quality. This table is based only on couples of which both partners provided information on relationship quality. The marginal percentages show that childless men and women rate the quality of their relationship higher than men and women with a child, which is consistent with studies that show a negative effect of the presence of children on relationship quality (Glenn & McLanahan, 1982; Houseknecht, 1979). Furthermore we see that extremely

divergent perceptions (combinations of high and low quality) are not frequent, but combinations that deviate one category are more common: About a little over 40% of childless couples as well as couples with one child belong to these categories.

Table 1 here

In Table 2 we present descriptive characteristics for childless couples and couples with one child. About 45% of the childless couples had a child between Waves 1 and 2 or the woman was pregnant with a first child at Wave 2, and about 53% of the couples with one child had a second child or pregnancy. The distributions of man's and woman's relationship quality indicate that the nonresponse rate on relationship quality is higher among fathers than among mothers and among childless men and women. This represents the fact that fathers were less likely to participate in the survey as partner respondents. Not surprisingly, more couples with a child than childless couples were married. On the other control variables, differences between childless and parental couples are also in line with expectations. For example, on average the mothers are older than childless women, they are much less likely to work full-time or in a long part-time job, and much more likely to work in a short part-time job or not to work at all, and the relationship duration of couples with a child is longer than that of childless couples.

Table 2 here

First Births

Table 3 shows the odds ratios of first birth between Wave 1 and Wave 2, or being pregnant with a first child at Wave 2. Model 1 includes woman's relationship quality and control variables. Woman's age has a positive effect on the likelihood of having a first birth and woman's age squared has a small negative effect, indicating that the positive effect of woman's age becomes weaker or negative, the older the woman is. Age differences also matter with increased likelihood of a birth, when the man is over 5 year older. Because so few men are more than 2 years younger than their partner, the contrast with couples of similar age is not statistically significant. Woman's educational level and the difference in educational level between the partners do not have an effect. With regard to the working hours, couples in which the man works full-time and the woman has a large part-time job, are most likely to have a first birth. Married couples are about 2.3 times more likely to have a first birth than

cohabiting couples. The duration of the relationship at Wave 1 and the duration of the observation (time between Waves 1 and 2) do not have effects. Whether the man reported on relationship quality or whether this information is missing, does not influence the likelihood of a first birth. Effects of the control variables do not change substantially across the other models in which we also test the influence of man's relationship quality.

The odds ratio of having a first child is highest for women with medium relationship quality; they are twice as likely to have a child as those with low-quality relationships. Women who report high relationship quality have an odds ratio of 1.39, which is not significantly different from the odds ratio of those with the lowest scores. Neither are their odds of having a first child significantly different from those of women with medium-quality relationships. Hence, the effect of woman's relationship quality on the chance of a first child seems to be nonmonotonic. This lends support to Hypothesis 1c predicting that the effect is curvilinear.

In Model 2, we examined the effect of the man's view of the relationship without taking into account the woman's view. No association was found between the man's relationship quality and the couple's likelihood of having a first child between interviews. (When control variables are not taken into account, man's relationship quality is positively related to the risk of first birth though, also when woman's relationship quality is included. Apparently, this effect is spurious.) In Model 3 woman's as well as man's relationship quality are included. The results show that man's relationship quality still does not affect first birth and that the pattern of effect of woman's relationship quality remains largely unchanged. Yet, the odds ratio of women with medium relationship quality is now not only significantly different from that of women with low relationship quality, but also from those with high quality (the latter at the .10 α -level).

Adding man's relationship quality to woman's relationship quality (Model 3 vs. Model 1) does not result in an improvement of the model's fit ($\Delta\chi^2 = 2.74$, $\Delta df = 2$, $p = .25$), whereas adding woman's relationship quality to man's relationship quality (Model 3 vs. Model 2) does so at the .10 α -level ($\Delta\chi^2 = 5.44$, $\Delta df = 2$, $p = .07$). Considering the small N we tentatively conclude that the woman's relationship quality affects the likelihood of first birth, whereas the man's does not. This supports Hypothesis 2a, stating that women's perceptions of relationship quality have a stronger effect on childbearing than men's.

To test whether the effects of man's and woman's relationship quality depend on each other, we estimated a model including the interaction between man's and woman's relationship quality. The interaction analysis was based on couples for whom both partners'

quality was observed ($N = 342$). Compared to the additive model for these couples (analogue to Model 3), no improvement in fit was obtained by adding interaction terms ($\Delta\chi^2 = 5.26$, $\Delta df = 4$, $p = .26$). (Details of the analysis are available on request.) Therefore we reject Hypothesis 3, that one partner's assessment of relationship quality as unfavorable for childbearing is sufficient to inhibit first birth.

Table 3 here

Second Births

In Table 4 we present the odds ratios of having a second birth or being pregnant with second child at Wave 2. Models 1 to 3 are parallel to those estimated for first births, except that we also control for the critical duration parameter of the youngest child's age. We find the well-known negative association between the youngest child's age and the birth risk, consistent with strong preferences for spacing children at 2 – 3 years, if a couple plans to have a second child. The older the first child is at Wave 1, the less likely the couple will have a second child at all. The odds ratios of woman's age and woman's age squared show that, analogue to the effects on first birth, the older the woman is, the more likely the couple is to have a next child and that this positive effect gets weaker or negative with increasing age. Whereas age differences between partners do influence the likelihood of a first birth, once a couple entered into parenthood, the age difference does not have an effect on the likelihood of having a second child. Woman's educational attainment positively affects the likelihood of a higher order birth, once she already has at least one child (see Kravdal, 2007 for positive effects of education on second and third birth rates). If the woman is higher educated than her partner though, the likelihood of having a second child decreases. We find no association between the working hours of the couple and the likelihood of having a second child. Whereas marital status has a strong influence on first birth, it does not affect the odds of having another child for parental couples. The duration of the relationship and the duration of the observation do not have an effect. Finally, whether woman's report is missing does not affect second birth. Again, the effects of the control variables do not change substantially in the other models, except that in Model 2 couples in which the man works full-time and the woman a long part-time job, are more likely to have a second child (at the .10 α -level).

As for the first birth, Model 1 reveals a nonmonotonic effect of woman's relationship quality; women with medium-quality relationships are three times as likely to have a second child as women who report the lowest levels of relationship quality.

In Model 2, men who report medium levels of relationship quality also have the highest likelihood of having a second child, but men who report high levels relationship quality are also significantly more likely to have a second child than those with low relationship quality. The differences between men with medium and those with high relationship quality are not statistically significant. Model 3, the additive model, shows that the patterns of effect of woman's and man's relationship quality remain largely the same when they are both included. So, as for first birth, we conclude that woman's relationship quality has a nonmonotonic effect, supporting Hypothesis 1c. In addition we conclude that the effect of man's relationship quality on second birth is positive, though nonlinear, which lends support to Hypothesis 1a. We do not find support for Hypothesis 1b, which predicts a negative influence of relationship quality on childbearing.

Comparing the fit of Model 3 with that of 1, respectively 2, shows that adding man's relationship quality to woman's relationship quality (Model 3 vs. Model 1) results in an increase in the model's fit ($\Delta\chi^2 = 7.18$, $\Delta df = 2$, $p < .05$, $p = .03$), and that adding woman's relationship quality to man's relationship quality (Model 3 vs. Model 2) also leads to an increase in the model's fit at the .10 α -level ($\Delta\chi^2 = 5.58$, $\Delta df = 2$, $p = .06$). That is, a model with man's and woman's relationship quality produces the best explanation for second births. Improvements in model fit are not that different, consistent with the null hypothesis that neither partner's perceived relationship quality has stronger effects than the other partner's perceived quality. Therefore, with regard to second births, we reject Hypotheses 2a and 2b, which state that either women's or men's views on the relationship have a stronger influence.

We tested Hypothesis 3 in a similar way as for first births, using only couples with valid reports of both partners' relationship quality. The difference in fit between the additive and interaction models was not statistically significant ($\Delta\chi^2 = 4.86$, $\Delta df = 4$, $p = .30$). (Details of the analysis are available upon request.) As for first births, we do not find unique effects of partner's diverging views of relationship quality on childbearing and we again reject Hypothesis 3.

Table 4 here

DISCUSSION

Our couple analyses of the likelihood of first and second births show that women's as well as men's perceptions of relationship quality influence couples' childbearing but in different ways. Only women's perceptions of the quality of the relationship are important for first

births, whereas second births are also affected by men's views of the relationship. In addition, women's perceptions have a curvilinear relationship with childbearing whereas men's perceptions are positively but nonlinearly associated with second births. We also found that effects of each partners' perceptions are independent – divergence in perceptions of relationship quality have no unique effects on the couple's childbearing.

We posed three hypotheses on the direction of the influence of relationship quality (for both men and women). It could be positive (Hypothesis 1a), because a good relationship offers the best environment for raising children, and children represent a large investment in the relationship that raises the costs of separation, or negative, because having a child could cement a bad relationship (Hypothesis 1b). On the basis of Rijken and Liefbroer (2009), however, we also argued that people with medium level relationship quality could have the highest childbearing rates (Hypothesis 1c), because those who are very happy with their partner relationship might be afraid that having a(nother) child will have negative consequences for the relationship. Also, people who consider their relationship good enough, but not outstanding, might want to revitalize their relationship with having a child.

Our findings do not support Hypothesis 1b, predicting a negative relationship between partner relationship quality and childbearing. They do indicate that the direction of the influence is nonmonotonic for women but only nonlinear for men. Women are most likely to have first and second children when they perceive their relationship to be of medium level quality. Those who find their relationship of high quality are in between women with low- and medium-quality relationships, regarding the likelihood of having a child. Men who already have a child and who perceive their relationship to be of medium or high quality are more likely to have second children than fathers who report the lowest relationship quality, with no significant differences between the medium and high category. This suggests that both men and women prefer to have children in a relationship that is at least good enough or basically sound, but women who are really happy with their relationship might be more afraid of the possibly negative consequences of a child for their relationship than men who are equally happy with their relationship. The fact that our sample was interviewed at different ages, different periods and with different measures of relationship quality than respondents in the study of Rijken and Liefbroer (2009) adds additional weight to the hypothesis that especially happy relationships may inhibit childbearing.

The question remains why we find that women who are really satisfied with their relationship are less likely to have children than women who rate their relationship quality as medium whereas we do not find this pattern for men. One suggestion is that women have

more realistic expectations about the negative consequences of having children than men – “women expect real children, men expect ideal children” – and this could seem more of a threat to women who rate their relationship quality the highest. This argument however, would seem more valid for couples who expect a first child than for parental couples. Once a couple has had a child, both partners have experienced the consequences, but the positive effect was found for men who already have at least one child.

In developing Hypothesis 2a and Hypothesis 2b, we gave arguments why either men’s or women’s perceptions of the quality of the relationship could have a stronger influence on childbearing. We found that only women’s views of the quality of the relationship influence first birth, whereas both women’s and men’s views affect second births. We had not expected differences in effects of relationship quality on first and second births. So, why do men’s perceptions of relationship quality only matter for second births? One of our arguments for the influence of men’s relationship quality on childbearing was that men would avoid childbearing in unhappy relationships, because they fear the risk of losing their children after a divorce. Nevertheless, it may be hard to imagine the “loss” of a cherished child when one does not yet have children and understand fully what it feels like to love a child. Only fathers may be influenced by such worries. For women, the image of struggling to raise children alone – one of the reasons we suggested why women might avoid childbearing in low-quality relationships – might seem more real even before motherhood becomes a reality. The other argument why men’s perceptions could be less influential than women’s, was that women are more powerful in decision-making about having children, because it is their sphere of influence. Yet, as women’s perceptions do not have more influence on second birth, this argument does not seem valid.

Our rejection of Hypothesis 3, that either partner’s perception of the relationship as unfavorable for childbearing is enough to inhibit childbearing, may reflect the variability of relationship quality over time and the possibility that one or the other partner’s unhappiness (or happiness) is perceived by or transmitted to the other, “averaging out” the two partners’ perceptions and leading to an average birth outcome.

A reason why we might find stronger effects of relationship quality on second births than on first births in general is that relationship quality at the time of Wave 1 is more relevant for couples with a child in deciding about a second child than for childless couples deciding about a first child. Parents are more limited in time; if they want to have another child, they probably want to have it within a few years – hence before Wave 2 – to avoid a

large birth interval (see subsection 3.3). This might also explain why effects of men's perceptions of relationship quality are only found for higher order births.

Our study has extended research on couple relationships and fertility in several ways. We used direct observations of quality rather than statistical estimates of stability, and we observed differences in the two partners' perceptions of the same relationship. We were thus able to identify gender differences in the strength and direction of the association between relationship quality and childbearing and test hypotheses about the interaction between partners' perceptions of quality.

A limitation of this study is that we could not take into account partners' childbearing desires or intentions. Our results do not tell whether differences between the effects of men's and women's perception of the quality of the relationship are caused by a differential effect of relationship quality on childbearing preferences or intentions, or a differential effect of childbearing preferences or intentions on birth outcomes. Yet, previous research from the United States (Sobel & Arminger, 1992; Thomson, 1997; Thomson et al., 1990) and a study from Sweden (Thomson & Hoem, 1998) suggest that in conjugal family systems, the influence of men's and women's childbearing preferences are equal. Nevertheless, it would be fruitful to investigate the implications of divergence in relationship quality perceptions for divergence in childbearing desires or intentions, to determine whether the associations we observe between partners' perceptions of relationship quality and subsequent childbearing are mediated or moderated by partners' childbearing desires or intentions. We are convinced by our own and others' results – as well as by a considerable body of theory – that partner relationships are central to childbearing decisions and outcomes.

REFERENCES

- Amato, P. R., & Keith, B. (1991). Parental divorce and adult well-being: A meta-analysis. *Journal of Marriage and the Family*, *53*, 43 – 58.
- Amato, P. R., Loomis, L. S., & Booth, A. (1995). Parental divorce, marital conflict, and offspring well-being during early adulthood. *Social Forces*, *73*, 895 – 915.
- Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy*, *85*, 1141 – 1187.
- Bernard, J. (1972). *The future of marriage*. New York: World.
- Bulatao, R. A. (1981). Values and disvalues of children in successive childbearing decisions. *Demography*, *18*, 1 – 25.
- Callan, V. J. (1986). The impact of the first birth: Married and single women preferring childlessness, one child, or two children. *Journal of Marriage and the Family*, *48*, 261 – 269.
- Carmichael, G. A., & Whittaker, A. (2007). Choice and circumstance: Qualitative insights into contemporary childlessness in Australia. *European Journal of Population*, *23*, 111 – 143.
- Coombs, L. C., & Chang, M. (1981). Do husbands and wives agree? Fertility attitudes and later behavior. *Population and Environment*, *4*, 109 – 27.
- Corijn, M., Liefbroer, A. C., & De Jong Gierveld, J. (1996). It takes two to tango, doesn't it? The influence of couple characteristics on the timing of the birth of the first child. *Journal of Marriage and the Family*, *58*, 117 – 26.
- Davidson, A. R., & Beach, L. R. (1981). Error patterns in the prediction of fertility behaviours. *Journal of Applied Social Psychology*, *11*, 475 – 488.
- De Leeuw, E. D., & De Heer, W. (2001). Trends in household survey nonresponse: A longitudinal and international comparison. In R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.), *Survey nonresponse* (pp. 41 – 54). New York: Wiley.
- Doorten, I. (2008). The division of unpaid work in the household: A stubborn pattern? Doctoral dissertation (ICS dissertation series No. 141), Utrecht University, Utrecht, the Netherlands.
- Duncan, O. D., Freedman, R., Coble, J. M., & Slesinger, D. P. (1965). Marital fertility and size of family of orientation. *Demography*, *2*, 508–515.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2005). *Codebook of the Netherlands Kinship Panel Study: A multi-actor, multi-method panel study on solidarity in family relationships. Wave 1* (NKPS Working Paper No. 4). The Hague, the Netherlands: Netherlands Interdisciplinary Demographic Institute.

- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2007). *Codebook of the Netherlands Kinship Panel Study: A multi-actor, multi-method panel study on solidarity in family relationships, Wave 2* (NKPS Working Paper No. 6). The Hague, the Netherlands: Netherlands Interdisciplinary Demographic Institute.
- European Commission. (1997). *The young Europeans*. Special Eurobarometer 114/Wave 47.2. Retrieved April 7, 2008, from http://ec.europa.eu/public_opinion/archives/ebs/ebs_114_en.pdf
- Friedman, D., Hechter, M., & Kanazawa, S. (1994). A theory of the value of children. *Demography*, *31*, 375 – 401.
- Furstenberg, F. F. Jr., & Cherlin, A. J. (1991). *Devided Families: What happens to children when parents part?* Cambridge, MA: Harvard University Press.
- Glenn, N. D., & McLanahan, S. (1982). Children and marital happiness: A further specification of the relationship. *Journal of Marriage and the Family*, *62*, 927 – 947.
- Goldscheider, F. K., Webster, P., & Kaufman, G. (2000). Men, parenthood and divorce in the era of the Second Demographic Transition. In C. Bledsoe, S. Lerner, & J. I. Guyer (Eds.), *Fertility and the male life cycle in the era of fertility decline* (pp. 331 – 342). New York: Oxford University Press.
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin*, *108*, 267 – 290.
- Hobcraft, J., & Kiernan, K. (1995). Becoming a parent in Europe. In *EAPS/IUSSP European Population Conference Proceedings*, Milan, Italy. Milan: Franco Angeli
- Hoffman, L. W., & Manis, J. D. (1979). The value of children in the United States: A new approach to the study of fertility. *Journal of Marriage and the Family*, *41*, 583–596.
- Houseknecht, S. K. (1979). Childlessness and marital adjustment. *Journal of Marriage and the Family*, *41*, 259 – 265.
- Jansen, M. D., & Liefbroer, A. C. (2006). Couples' attitudes, childbirth and the division of labor. *Journal of Family Issues*, *27*, 1487 – 1511.
- Koo, H. P., & Janowitz, B. K. (1983). Interrelationships between fertility and marital dissolution: Results of a simultaneous logit model. *Demography*, *20*, 129 – 145.
- Kravdal, Ø. (2007). Effects of current education on second- and third-birth rates among Norwegian men and women born in 1964: Substantive interpretations and methodological issues. *Demographic Research*, *17*, 211 – 246.
- Liefbroer, A. C. (2005). The impact of perceived costs and rewards of childbearing on entry into parenthood: Evidence from a panel study. *European Journal of Population*, *21*, 367 – 391.

- Lillard, L. A., & Waite, J. L. (1993). A joint model of marital childbearing and marital disruption. *Demography*, *30*, 653 – 681.
- Malpas N., & Lambert, P. V. (1993). *Les Européens et la famille* [Europeans and the Family]. Special Eurobarometer 77/Wave 39. European Commission. Retrieved April 7, 2008, from http://ec.europa.eu/public_opinion/archives/ebs/ebs_077_fr.pdf
- Morgan, S. P. (1985). Individual and couple intentions for more children: A research note. *Demography*, *22*, 125 – 132.
- Morrison, D. R., & Coiro, M. J. (1999). Parental conflict and marital disruption: Do children benefit when high-conflict marriages are dissolved? *Journal of Marriage and the Family*, *61*, 626 – 637.
- Myers, S. M. (1997). Marital uncertainty and childbearing. *Social Forces*, *75*, 1271 – 1289.
- Rijken, A. J., & Liefbroer, A.C. (2009). The effects of relationship quality on fertility. *European Journal of Population*, *25*, 27 – 44.
- Schoen, R., Kim, Y. J., Nathanson, C. A., Fields, J., & Astone, N. M. (1997). Why do Americans want children? *Population and Development Review*, *23*, 333 – 358.
- Secombe, K. (1991). Assessing the costs and benefits of children: Gender comparisons among childfree husbands and wives. *Journal of Marriage and the Family*, *53*, 191 – 202.
- Sobel, M.E., & Arminger, G. (1992). Modeling household fertility decisions: A nonlinear simultaneous probit model. *Journal of the American Statistical Association*, *87*, 38 – 47.
- Testa, M. R. (2006). *Childbearing preferences and family issues in Europe*. Special Eurobarometer 253/Wave 65.1. European Commission. Retrieved April 7, 2008, from http://ec.europa.eu/public_opinion/archives/ebs/ebs_253_en.pdf
- Thomson, E. (1997). Couple childbearing desires, intentions, and births. *Demography*, *34*, 343 – 54.
- Thomson, E. (2002). Motherhood, fatherhood and family values. In R. Lesthaeghe (Ed.), *Meaning and choice: Value orientations and life course decisions* (pp. 251 – 272). The Hague, the Netherlands/ Brussels, Belgium: Nidi/ CBGS publications.
- Thomson, E., & Collela, U. (1992). Cohabitation and marital stability: Quality or commitment? *Journal of Marriage and the Family*, *54*, 259 – 267.
- Thomson, E., & Henz, U. (2005). Union stability and stepfamily fertility in Austria, Finland, France & West Germany. *European Journal of Population*, *21*, 3 – 29.
- Thomson, E., & Hoem, J. M. (1998). Couple childbearing plans and births in Sweden. *Demography*, *35*, 315 – 322.
- Thomson, E., Hoem, J. M., Vikat, A., Buber, I., Fuernkranz-Prskawetz, A., Toulemon, L., Henz, U., Godecker, A. L., & Kantorova, V. (2002). Childbearing in stepfamilies:

Whose parity counts? In E. Klijzing, & M. Corijn (Eds.), *Fertility and partnership in Europe: Findings and lessons from comparative research*. (Vol. 2, pp. 87 – 99).

Geneva, Switzerland/New York: United Nations.

Thomson, E., McDonald, E., & Bumpass, L. L. (1990). Fertility desires and fertility: Hers, his, and theirs. *Demography*, 27, 579 – 588.

Thornton, A. (1978). Marital dissolution, remarriage, and childbearing. *Demography*, 15, 361 – 380.

Vikat, A., Thomson, E., & Hoem, J. M. (1999). Stepfamily fertility in contemporary Sweden: The impact of childbearing before the current union. *Population Studies*, 53, 211 – 225.

Table 1 Distribution of man's and woman's relationship quality at Wave 1 (%)

		Childless couples (<i>N</i> = 342)				Couples with one child (<i>N</i> = 264)			
		Woman's relationship quality				Woman's relationship quality			
		Low	Medium	High	Total	Low	Medium	High	Total
Man's relationship quality	Low	12.87	8.48	4.97	26.32	19.29	11.17	5.08	35.53
	Medium	9.65	10.50	12.57	37.72	8.12	15.74	11.17	35.03
	High	4.09	10.23	21.64	35.96	4.06	12.69	12.69	29.44
	Total	26.61	34.21	39.18	100.00	31.47	39.59	28.93	100.00

Source: Netherlands Kinship Panel Study, Wave 1 and 2 (2002–2003, 2007).

Table 2 Descriptive characteristics of the samples

Variable	Childless couples	Couples with one child		
	(<i>N</i> = 418)	(<i>N</i> = 265)		
	%	%		
Had birth between Wave 1 and Wave 2 (or woman pregnant at Wave 2)	45.22	53.58		
Relationship quality woman				
Low	24.40	29.43		
Medium	30.86	35.09		
High	35.41	27.44		
No response	9.33	7.92		
Relationship quality man				
Low	24.40	28.68		
Medium	32.78	27.17		
High	31.58	23.02		
No response	11.24	21.13		
Union Status				
Cohabiting	64.59	25.28		
Married	35.41	74.72		
Age difference				
Man ≤ 2 years younger or ≤ 5 years older	75.83	77.36		
Man > 5 years older	19.86	18.87		
Man > 2 years younger	4.31	3.77		
Education difference				
Equal level	52.39	48.68		
Woman higher	27.99	30.19		
Man higher	19.62	21.13		
Employment				
Man full-time, woman not employed	7.89	13.58		
Man full-time, woman short part-time	6.22	38.49		
Man full-time, woman long part-time	24.64	26.79		
Both full-time	45.45	7.17		
Other	15.79	13.96		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age woman ^a	29.01	4.62	31.97	4.49
Age youngest child ^a			3.00	3.18
Education woman ^b	7.13	1.74	6.57	1.97
Relationship duration ^a	7.55	4.54	10.97	5.59
Observation duration ^c	3.52	0.34	3.53	0.33

^aYears. ^bScale: 1-10. ^cMonths/12.

Source: Netherlands Kinship Panel Study, Wave 1 and 2 (2002–2003, 2007).

Table 3 Odds ratio estimates of first birth ($N = 418$)

Variable	Model 1		Model 2		Model 3	
	Odds ratio	z	Odds ratio	z	Odds ratio	Z
Age woman ^a	7.67***	5.50	7.83***	5.60	7.89***	5.54
Age woman squared ^a	0.96***	-5.62	0.96***	-5.72	0.96***	-5.66
Age difference						
Man ≤ 2 years younger or ≤ 5 years Older	1.00		1.00		1.00	
Man > 5 years older	0.37**	-3.30	0.39**	-3.16	0.37**	-3.29
Man > 2 years younger	2.23	1.31	2.19	1.26	2.48	1.46
Education woman ^b	0.96	-0.50	0.97	-0.34	0.97	-0.42
Education difference						
Equal level	1.00		1.00		1.00	
Woman higher educated	1.48	1.50	1.49	1.52	1.48	1.47
Man higher educated	1.19	0.50	1.15	0.41	1.20	0.52
Employment						
Man full-time, woman not	1.00		1.00		1.00	
Man full-time, woman short part-time	1.43	0.60	1.32	0.47	1.44	0.61
Man full-time, woman long part-time	2.92*	2.27	2.63*	2.04	2.81*	2.16
Both full-time	1.59	1.08	1.49	0.93	1.52	0.97
Other	0.57	-1.09	0.58	-1.01	0.58	-1.07
Union status						
Cohabiting	1.00		1.00		1.00	
Married	1.54**	3.35	1.49**	3.03	1.51**	3.12
Relationship duration ^a	0.96	-1.34	0.95	-1.57	0.96	-1.37
Observation duration ^c	1.29	0.76	1.21	0.57	1.28	0.73
Relationship quality partner missing ^d	1.24	0.59	1.55	1.10		
Relationship quality woman						
Low	1.00				1.00	
Medium	2.04**	2.31			1.97*	2.15
High	1.39	1.09			1.21	0.58
No response	2.29†	1.85			2.13†	1.67
Relationship quality man						
Low			1.00		1.00	
Medium			0.97	-0.09	0.87	-0.44
High			1.50	1.32	1.41	1.03
No response			1.39	0.80	1.34	0.71
χ^2	101.22		98.53		103.96	
Df	18		18		20	

Note: No SE 's are presented because odds ratio's are presented in stead of B 's. $z = B/SE$.

^aYears. ^bScale: 1–10. ^cMonths/12. ^d0 = no, 1 = yes.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Source: Netherlands Kinship Panel Study, Wave 1 and 2 (2002–2003, 2007).

Table 4 Odds ratio estimates of second birth ($N = 265$)

Variable	Model 1		Model 2		Model 3	
	Odds ratio	z	Odds ratio	z	Odds ratio	z
Age first child ^a	0.74**	-3.45	0.75**	-3.37	0.74**	-3.38
Age woman ^a	2.98*	2.58	3.20**	2.77	3.25**	2.75
Age woman squared ^a	0.98**	-3.02	0.98**	-3.21	0.78**	-3.21
Age difference						
Man ≤ 2 years younger or ≤ 5 years older	1.00		1.00		1.00	
Man > 5 years older	0.70	-0.90	0.71	-0.84	0.69	-0.91
Man > 2 years younger	0.87	-0.16	0.83	-0.21	0.80	-0.23
Education woman ^b	1.24*	2.10	1.20†	1.77	1.23†	1.93
Education difference						
Equal level	1.00		1.00		1.00	
Woman higher educated	0.29**	-3.25	0.31**	-3.13	0.25**	-3.45
Man higher educated	2.14	1.64	2.03	1.50	2.04	1.50
Employment						
Man full-time, woman not	1.00		1.00		1.00	
Man full-time, woman short part-time	1.63	0.96	1.93	1.30	1.68	1.00
Man full-time, woman long part-time	2.00	1.22	2.67†	1.76	2.17	1.33
Both full-time	1.20	0.24	1.58	0.61	1.25	0.29
Other	2.21	1.31	2.53	1.51	2.40	1.40
Union status						
Cohabiting	1.00		1.02		1.03	
Married	1.19	0.93	1.00	1.17	1.00	1.01
Relationship duration ^a	1.03	0.80	1.23	0.49	1.21	0.78
Observation duration ^c	1.99	1.42	1.94	1.39	2.05	1.46
Relationship quality partner missing ^d	0.70	-0.96	0.72	-0.56		
Relationship quality woman						
Low	1.00				1.00	
Medium	3.29**	2.77			2.53*	2.23
High	2.73*	1.33			1.32	0.63
No response	1.09	0.23			1.04	0.07
Relationship quality man						
Low			1.00		1.00	
Medium			3.30**	2.76	2.97*	2.46
High			2.78*	2.31	2.44†	1.94
No response			1.25	0.55	1.24	0.50
χ^2	100.03		101.62		107.20	
df	19		19		21	

Note: No SE 's are presented because odds ratio's are presented in stead of B 's. $z = B/SE$.

^aYears. ^bScale: 1–10. ^cMonths/12. ^d0 = no, 1 = yes. ^e $z = B/SE$.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Source: Netherlands Kinship Panel Study, Wave 1 and 2 (2002–2003, 2007).