

Happy families, high fertility?

Childbearing choices in the context of
family and partner relationships

Rijken, A. J.

Happy families, high fertility? Childbearing choices in the context of family and partner relationships

Dissertation Utrecht University, the Netherlands, with summary in Dutch

Cover design: Kirsten Schuil, www.kirstenschuil.nl

Lay out: Legatron Electronic Publishing, Rotterdam

Printed by: Ipskamp Drukkers BV, Enschede

ISBN: 978-90-393-5126-0

© Arieke J. Rijken, 2009

All rights reserved. No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage and retrieval system without prior written permission of the author.

Happy families, high fertility?

Childbearing choices in the context of family and partner relationships

Gelukkige families, hoge vruchtbaarheid?
Keuzen over het krijgen van kinderen in de context van familie-
en partnerrelaties
(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Utrecht
op gezag van de rector magnificus, prof. dr. J. C. Stoof,
ingevolge het besluit van het college voor promoties
in het openbaar te verdedigen op
vrijdag 25 september 2009 des middags te 2.30 uur

door

Ariaantje Johanna Rijken

geboren op 18 maart 1980 te Leuven, België

Promotoren: Prof. dr. G. C. M. Knijn
Prof. dr. A. C. Liefbroer
Prof. dr. A. J. M. W. Hagendoorn

Parts of this study are based on data from the Netherlands Kinship Panel Study, which is funded by grant 480–10–009 from the Major Investments Fund of the Netherlands Organisation for Scientific Research (NWO), and by the Netherlands Interdisciplinary Demographic Institute (NIDI), Utrecht University, the University of Amsterdam, and Tilburg University.

Manuscript committee: Prof. dr. J. van Bavel (Free University of Brussels)
Prof. dr. A. E. Komter (Utrecht University)
Prof. dr. ir. A. G. van der Lippe (Utrecht University)
Prof. dr. W. H. J. Meeus (Utrecht University)
Prof. dr. M. C. Mills (University of Groningen)

Voorwoord

Het was een voorrecht om tijdens het schrijven van dit proefschrift omringd te zijn door zoveel mensen van wie ik kon leren, die mij inspireerden en die het werk en alles daaromheen leuker maakten. Een aantal mensen wil ik specifiek bedanken.

Allereerst gaat mijn dank uit naar mijn promotoren Trudie Knijn, Aat Liefbroer en Louk Hagendoorn. Trudie, onze samenwerking begon al in 2002. Het is mede dankzij jouw enthousiasme en inspiratie tijdens mijn afstudeeronderzoek en onze samenwerking in “het Noordische project”, dat ik besloot te gaan promoveren. Ik ben dan ook erg dankbaar dat ik de mogelijkheid kreeg dat bij jou te doen. Ik heb waardering voor de grote vrijheid die je me hebt gegeven bij de invulling van het onderzoek. Met plezier kijk ik terug op onze discussies over de interviews van ons minipanel onderzoek. Bedankt voor je begeleiding door de jaren heen! Aat, zonder jouw analytisch inzicht had dit proefschrift nooit kunnen worden tot wat het nu is. Bedankt voor alle kennis over statistische methoden die je me hebt bijgebracht en voor je constructieve commentaar op mijn teksten. De dagen waarop ik met jou op het NIDI werkte waren altijd erg prettig; productief en toch ontspannen! Ik ben dan ook heel erg blij dat wij onze samenwerking nu voortzetten in een nieuw onderzoeksproject bij het NIDI. Louk, bedankt voor je scherpe oog voor structuur en logica, en voor je frisse kijk op mijn papers.

In early 2008, I worked with Elizabeth Thomson at the Stockholm University Demography Unit, where I enjoyed great hospitality. Betty, thanks for being so generous with your time, not only during my stay in Stockholm, but also afterwards by answering countless e-mails. Working with you was and still is an exceptionally valuable experience!

Naast mijn begeleiders en co-auteurs ben ik vele anderen dank verschuldigd voor hun bijdrage aan mijn onderzoek en mijn ontwikkeling als onderzoeker. De seminars met de NKPS-teamleden en -aio's waren ontzettend leerzaam. Ook de leden van het Work & Family seminar wil ik bedanken voor hun feedback en de interessante discussies. Ik dank Mieke van der Stigt en Fenella Fleischmann voor het houden van interviews voor mijn minipanel onderzoek en ik ben de respondenten dankbaar voor hun openheid in de verhalen die ze ons vertelden. De leden van de beoordelingscommissie van dit proefschrift ben ik erkentelijk voor hun tijd en inzet. Kirsten Schuil bedank ik voor het ontwerpen van de omslag van dit boek.

ASW bood een prettige werkomgeving. Het ICS vormde een stimulerende uitbreiding van mijn onderzoeksomgeving. In het bijzonder voelde ik me thuis op kamer 1530, met mijn kamergenoten Freek en Willem. We konden altijd bij elkaar terecht voor vragen over inhoudelijke of methodologische kwesties, maar ook voor relativerende reflecties op de wetenschap en vooral voor slap geouwehoer. Jongens, het was supergezellig! Freek, vanaf de eerste dag zijn als we als kamergenoten en ICS-jaargenoten samen opgetrokken. Ik heb goede herinneringen aan de zomer van 2006, waarin we naar Kreta en Ann Arbor gingen. Fijn dat je mijn paranimf wilt zijn!

Ook veel andere collega's van ASW, het ICS en het NIDI hebben bijgedragen aan de sociale kanten van het aio-schap. Gezamenlijke cursussen, etentjes, "wildgave" uitgaansavonden, congresbezoek en een weekendje weg brachten veel gezelligheid en vriendschap. Anne van Putten, Freek, Rense, Anca, Gerald, Manuela en Erik: bedankt voor jullie gezelschap als ICS-jaargenoten. Anne Roeters, Renske, Borja, Freek en Samyr: onze maand aan de ICPSR summer school in Ann Arbor was – met al het gezwoeg in the computer labs en de avonturen tijdens de weekendtrips – een geweldige ervaring! Verder wil ik Marieke, Maike, Martijn, Mieke, Judith en Eva-Maria bedanken voor hun betrokkenheid en gezelschap in verschillende fases van mijn onderzoek.

Gedurende mijn dissertatieperiode heb ik met vele oude en nieuwe vrienden genoten van de broodnodige ontspanning en gezelligheid. In bijzonder noem ik Maarten, Frank en Wouter. Als kersverse aio maakte ik met hen een onvergetelijke trip naar Istanbul. Andere stedentrips volgden, evenals talloze gezellige avonden. Jongens, bedankt! Frank, wat leuk om met zo'n goede vriend ook het wel en wee van het promotietraject te kunnen bespreken. Verschillende vakgebieden, maar verrassend veel overeenkomsten. Bedankt dat je mijn paranimf wil zijn.

At Stockholm University I met Jennifer Holland, who has since then been an inspiring colleague and a close friend. Jennifer, in the past one and a half years we have combined "business & pleasure" in many places across Europe and the United States. I'm looking forwards to extending our travels to Morocco!

Tijdens dit promotieonderzoek, waarin familie- en partnerrelaties centraal staan, heb ik me vaak bevoorrecht gevoeld met mijn eigen thuisbasis; mijn "happy family". Lieve papa en mama, bedankt voor het warme nest, en dat jullie er altijd voor ons zijn. Pap, ik vind het leuk dat we ervaringen over het werken in de wetenschap kunnen uitwisselen. Marijn en Hanneke, wat heerlijk dat ik mijn broer en zus ook als twee van mijn beste vrienden kan beschouwen! Lieve Maarten, jij maakt mijn leven zoveel mooier en leuker. Bedankt dat jij aan mijn zijde staat!

Arieke Rijken
Utrecht, juni 2009

Contents

List of tables.....	13
1 Introduction.....	15
1.1 Aim of the study and research questions	17
1.2 Fertility in the Netherlands	20
1.3 Social interaction and fertility	22
1.4 The family of origin	23
1.5 The partner relationship.....	24
1.5.1 It takes two... ..	24
1.5.2 The influence of partner relationship quality on fertility	24
1.5.3 Couples' decision-making processes on having a first child	26
1.6 Data sources	27
1.7 Outline of the dissertation.....	28
2 Influences of the family of origin on the timing and quantum of fertility.....	31
2.1 Introduction	33
2.2 Theory and previous research	34
2.3 Method	37
2.3.1 Data	37
2.3.2 Variables	39
2.3.3 Method of analysis	41
2.4 Results	43
2.4.1 Descriptive characteristics	43
2.4.2 Age at first birth	43
2.4.3 Number of children	45
2.4.4 Sex differences in transmission patterns.....	47
2.4.5 Mediating processes	47
2.5 Conclusion and discussion.....	48
3 The influence of partner relationship quality on fertility.....	53
3.1 Introduction	55
3.2 Theory and previous studies	56
3.3 Method	59
3.3.1 Data	59
3.3.2 Variables	59
3.3.3 Method of analysis.....	61

3.4	Results	63
3.4.1	Main results	63
3.4.2	Additional analyses.....	64
3.5	Conclusion and discussion.....	67
4	His and her relationship quality: Effects on childbearing	71
4.1	Introduction	73
4.2	Theory and previous research.....	74
4.2.1	Relationship quality and fertility	74
4.2.2	His and her relationship quality	76
4.3	Method	78
4.3.1	Data	78
4.3.2	Variables	79
4.3.3	Method of analysis.....	81
4.4	Results	82
4.4.1	Descriptives	82
4.4.2	First births	83
4.4.3	Second births	86
4.5	Conclusion and discussion.....	89
5	Couples' decisions on having a first child: Comparing pathways to early and late parenthood.....	93
5.1	Introduction	95
5.2	Theoretical framework	97
5.3	Methods.....	100
5.3.1	Sample selection	100
5.3.2	Interview method and analysis.....	100
5.3.3	Description of the sample	101
5.4	Child wishes	103
5.5	Implicit and explicit decision-making	104
5.5.1	To have or not to have children.....	104
5.5.2	Timing of the first child	108
5.6	Giving up freedom? Motives and arguments	112
5.7	Conclusion and discussion.....	117
6	Conclusion and discussion	121
6.1	Introduction	123
6.2	Summary of findings	123

6.3	Families and fertility	127
6.3.1	Main conclusions	127
6.3.2	Contribution to the literature	127
6.3.3	Statistics and stories	129
6.3.4	Societal implications.....	130
6.4	Suggestions for future research	131
	Samenvatting (summary in Dutch)	135
	References	145
	Curriculum Vitae	159
	ICS Dissertation Series	161

List of tables

Table 2.1	Expected direction of effects of family-of-origin variables on age at first birth and number of children	38
Table 2.2	Descriptive characteristics of the samples	42
Table 2.3	Cox regression estimates of effects of family-of-origin variables on age at first birth.....	44
Table 2.4	Poisson regression estimates of the effect of family-of-origin variables on number of children	46
Table 3.1	Descriptive characteristics of the samples	62
Table 3.2	Description of relationship quality variables	63
Table 3.3	Risk estimates for hazard model of first childbirth and hazard model of second and third childbirth	65
Table 3.4	Risk estimates for additional hazard model of second and third childbirth.....	67
Table 4.1	Distribution of man's and woman's relationship quality at Wave 1	83
Table 4.2	Descriptive characteristics of the samples	84
Table 4.3	Odds ratio estimates of first birth	85
Table 4.4	Odds ratio estimates of second birth	88

Chapter 1

Introduction

1.1 Aim of the study and research questions

Having children, and especially having a first child, can be one of the most profound life-changing events people experience. Childbearing is irreversible and involves sustained commitment to supporting the child for a long time (Hobcraft & Kiernan, 1995). It also results in a long-lasting connection to one's partner, as a child will be shared even if the partnership dissolves. In current Western societies, this important event of having a first or an additional child is usually a matter of choice; sexuality and reproduction have been disconnected since the contraceptive revolution and the standard biography in which partnership, marriage and having children were inextricably bound up together has been replaced by a choice biography. People have to decide if they want to have children, when, how many, with whom and in what kind of relationship. In this study we try to contribute to the explanation of such decisions, incorporating several aspects of fertility behaviour such as timing of the first child, the chance of having a (next) child, and the final number of offspring. We do so using different types of data collected in the Netherlands and focusing on specific factors, which we will introduce below.

Numerous scholars, including demographers, sociologists and economists, have preceded us in trying to understand the fertility behaviour of people in different historical and geographical contexts. Some told grand stories of fertility change, focusing on aspects of modernization – the changing function of the family, the decline of (infant) mortality rates, ideational changes, the introduction of the contraceptive pill – to explain Western or worldwide fertility decline (Van de Kaa, 1996). The first or “classic” demographic transition (Thompson, 1929) refers to the decline in (infant) mortality followed by the decline in fertility, as witnessed from the 18th century onwards in several European populations, and continuing at present in most developing countries. When children lost their economic function for the family, child quality became more important to parents than the quantity of offspring. According to Ariès (1980), the first demographic transition was carried by altruistic investment in the quality of children. The second demographic transition (Lesthaeghe & Van de Kaa, 1986), which started in the 1960s and still continues, brings further fertility decline resulting in sustained sub-replacement fertility (less than 2.1 children per woman on average), along with emancipation of women and a decline of the centrality of marriage. Within the second demographic transition, the motivation for parenthood is adult self-realization and a choice for one single lifestyle in competition with several others (Lesthaeghe, 2007). Other scholars told more specific stories and focused on micro-level fertility behaviour. Many micro-level studies into the determinants of fertility timing or quantum focus on individual characteristics, particularly those of women. There is an enormous body of quantitative research into different types of individual determinants of fertility behaviour. The influence of demographic characteristics such as

age, age at marriage and number of siblings; economic characteristics such as educational attainment, income and employment; cultural aspects such as religion and ethnicity; and attitudes such as gender role attitudes have widely been tested.

Yet, fertility decisions are not made by isolated individuals; lives are lived interdependently. As Elder and colleagues state: “human lives cannot be adequately represented when removed from relationships with significant others” (Elder, Johnson, & Crosnoe, 2003, p. 13). This principle of “linked lives” is one of the central principles of the life course approach (Elder, 1985, 1992),¹ and implies that opinions and behaviours of significant others in an individual’s network have an effect on that individual’s life course options and choices. This interdependency may appear from long-term effects, such as detrimental effects of parents’ conflict and divorce on their children’s relationship formation as adults (Amato, 1996; Wolfinger, 2000), but interdependency is also expressed in the fact that when important decisions in the life course have to be taken, there is often more than one actor involved. Decisions regarding leaving home involve children and their parents, decisions regarding relationship formation or dissolution involve partners, decisions about care for the elderly involve older parents and their adult children. Applying this perspective of linked lives to choices about having children, we will study how fertility behaviour is embedded in the family of origin and in partner relationships.

Earlier fertility studies that did take into account families and partners included characteristics of both partners or other family members instead of those of only one person, but usually only addressed characteristics such as the aforementioned demographic or socio-economic ones. Scholars have for example examined the influence of parents’ number of children on their children’s number of children (e.g., Pearson & Lee 1899; Duncan, Freedman, Coble, & Slesinger, 1965; Murphy & Wang, 2001), the influence of parents’ income or education on their children’s fertility behaviour (Thornton, 1980; Barber, 2000; Murphy & Wang, 2001), and the effect of both partners’ socio-economic background (Sorenson, 1989; Andersson & Scott, 2007) or their division of household work (Mills, Mencarini, Tanturri, & Begall, 2008) on fertility. Yet, the influence of fertility determinants in the social-emotional realm has been largely ignored. This is unfortunate, given that fertility behaviour is likely to be affected not only by “hard” characteristics of individuals, their partners and families, but also by the way they interact with each other; that is, the nature of their relationships. Therefore, the overall aim of this study is to gain insight into the ways fertility behaviour is embedded in the family of origin and in partner relationships, particularly by examining the effects of the nature of relationships on fertility behaviour and looking at couples’ decision-making on having children.

First of all, the social interaction within the family network a person experiences when growing up may influence fertility values and preferences later in life. Our first research question thus reads:

¹ This approach emphasizes that life courses have become diversified. It takes into account the embeddedness of life course transitions (e.g., leaving the parental home, becoming a parent, retiring) in life course trajectories, and studies these transitions and trajectories within historic, socio-economic, and (family) network contexts.

1) *How does the nature of relationships in the family of origin affect fertility behaviour?*

Whereas the origins of an individual's ideas about having children may lay in childhood family experiences, as he or she grows older numerous other circumstances and experiences could influence fertility preferences and intentions. For instance: education, income, career prospects, possibilities to combine work and care, births among siblings, friends or neighbours – or the absence of births within one's network – housing, and not the least: partnership experiences. Actually deciding about whether and when to have children requires an evaluation of one's current and expected future situation. Obviously, an important aspect of that situation is the quality of the relationship with one's partner. Moreover, as the decision to have a child is usually a joint one, some kind of social interaction in the decision-making is likely to take place. Therefore, we move on to how fertility is embedded in the social interaction within the partner relationship, by posing our second research question:

2) *How does the nature of the partner relationship affect fertility behaviour?*

This question is split up into two sub-questions. First, we focus on the effects of the quality of the partner relationship:

2a) *How does the quality of the partner relationship affect fertility behaviour?*

We will examine several aspects of the influence of partner relationship quality on fertility; which dimensions of relationship quality are relevant, what is the direction of the effect, and how the effects of male and female partners' views on the quality of their relationship interrelate when these views differ. Are the views of one partner more influential than those of the other? And does relationship quality affect births of a different rank order in different ways?

Not only has the nature of interaction between partners largely been ignored as a determinant of fertility in previous research, the way partners interact in the actual decision-making about having children has also received little attention from scholars. Micro-level fertility research focuses predominantly on determinants and outcomes, but not on the decision-making itself. This decision-making process will be our second focus in answering question 2:

2b) *What is the nature of couples' decision-making processes on having a first child?*

In an era in which “the ideology of individualization” emphasizes the freedom of and the need for individuals to choose and plan their life course, it is interesting to examine an important life course decision – whether and when to have a first child – from a perspective of the interdependency between partners.

A basic assumption in this study is that nowadays in the Netherlands, having children is a choice, whether this choice is preceded by explicit decision-making or not, and whether people are aware of the circumstances and experiences that influence their choice or not. In reality, having children is, of course, not always a choice. On the one hand, some people cannot have children, or not as many as they want. Also, getting pregnant may take longer than desired. Yet, the 1998 Netherlands Fertility and Family survey shows that most women who actively try to get pregnant succeed at it, and do so within a reasonable timeframe (Steenhof & De Jong, 2000). On the other hand, some pregnancies may be unwanted. However, the level of birth control in the Netherlands is very high (Coleman & Garssen, 2002). In the next section we will discuss this in more detail.

1.2 Fertility in the Netherlands

Issues concerning fertility have received a lot of attention in the Dutch media recently. The message often appeared to be that Dutch couples wait too long to have children, and have too few. First-time mothers in the Netherlands are among the oldest in the world. The Dutch fertility rate of about 1.7 is, however, not that low from a European perspective. In this section we give a short overview of several aspects of Dutch fertility from a historic and a comparative European perspective.

In the late 19th century, the Dutch fertility level was among the highest in Europe and the pace of fertility decline was slow. Subsequently, in the 1950s and 1960s, the Netherlands was still characterized by high fertility, with an average of three children per women. There seems to be consensus that during this period, religion slowed down the adoption of deliberate fertility control in the Netherlands (De Kok & Van Bavel, 2006) and the high level of Dutch fertility is sometimes accounted for as a symptom of ‘demographic competition’ between the Catholic and the various Protestant denominations in the pillarized Dutch society (Bagley, 1973; Engelen & Hillebrand, 1986). From late 1960s to the late 1970s, the Total Fertility Rate (TFR)² almost halved, and continued to be at a level of about 1.5 until the late 1990s, reaching a low point of 1.47 in 1983 (Statistics Netherlands, 2009). From 1996 onwards there has been a small increase in the TFR, which has been a little over 1.7 since 2000. This level is considerably higher than that of most Southern and Eastern European countries and Germany, where fertility rates range from 1.2 to 1.4. The highest fertility rates in Europe are currently found in France, Ireland, the United Kingdom and the Nordic countries, ranging between 1.8 and 2.0 (Eurostat, 2008). In contrast to the fluctuations in the TFR in the 1980s and 1990s, cohort fertility rates

² TFRs are based on the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year. The TFR is therefore the completed fertility of a hypothetical generation, computed by adding the fertility rates by age for women in a given year (Eurostat, 2008).

are rather stable – with a slight decrease from 1.9 to 1.8 – for the cohorts of women born between 1950 and 1975, although the number of children on the cohorts from about 1965 is still uncertain (Fokkema, De Valk, De Beer, & Van Duin, 2008).

The proportion of childless women in the Netherlands is among the highest in Europe (Coleman & Garssen, 2002). Eighteen percent of women born in 1960 stayed childless. The two-child family is most popular; 41% of women born in 1960 had two children, 16% had one child, 17% three children and 8% four or more (Eurostat, 2002).

The entry into parenthood has been considerably postponed since 1970. At that time, the mean age of Dutch women at first childbearing was 24.3 and lower than ever since 1850 (Van Gaalen & Van Poppel, 2007). Currently, together with Spanish and British mothers, Dutch first-time mothers are among the oldest in the world, with an average age of 29.4 at the birth of their first child. Dutch men are about 2.5 years older when they enter fatherhood.³ The largest contribution to the increase in age at first birth is formed by a decrease of births among women younger than 25; the chances of having a first child before the age of 25 decreased by 33% between 1970 and 2006. The chances of having a first child after age 35 increased by 4.7% in the same period (Bonneux, Zaadstra, & De Beer, 2008). Second children are born on average 3 years after the first child, and third children arrive on average 3.5 years later (De Jong & Broekman, 2001). Of all children, 75% is born to a mother who is between 25 and 35 years old nowadays (Bonneux et al., 2008).

The Netherlands has one of the lowest teenage fertility rates in the world, this rate is also considerably lower than that of its neighbours in Western Europe. Abortion rates are low as well (Coleman & Garssen, 2002). This is generally seen as an indication of a low level of unwanted pregnancies. The Netherlands is considered as a country that has an open sexual climate, good access to means of contraception and broad sexual education (Lewis & Knijn, 2002; Garssen, 2004). The 2003 Netherlands Family and Fertility survey shows that 85% of fecund women between 18 and 45 who are not (trying to get) pregnant use a form of birth control, mainly the pill. The main reason for not using birth control is not being in a relationship (De Graaf, 2004). Coleman and Garssen (2002) speak of “nearly perfect birth control”, and refer to the Netherlands as the land of “perfect family planning”.

One could say, though, that good family planning not only concerns the prevention of unwanted births, it also concerns the realization of desired pregnancies. Estimates based on the 1998 Netherlands Fertility and Family survey indicate that of women who are actively trying to get pregnant with a first child, 50% becomes pregnant within 3 months, almost 70% within 6 months and 80% within 18 months. The percentages are a little higher for pregnancies of a second child. Three percent of the women who actively

³ This is based on the age differences between newlyweds (Statistics Netherlands, 2008a) and between new cohabitants (Steenhof & Harmsen, 2002) in 2000. There are no statistics on the average age of men at the birth of their first child in the Netherlands.

try to get pregnant remain childless, and another 3% does not get a desired second child (Steenhof & De Jong, 2000).

Extramarital fertility rates have strongly increased in recent decades. Whereas 2% of all children born in 1970 were born outside marriage, this rate was 40% in 2007. Fifty percent of all first-borns in 2007 were born to an unmarried mother. With these rates, the Netherlands takes up a middle position within Europe (Statistics Netherlands, 2008b). Most of this non-marital fertility concerns desired children of cohabiting parents (Coleman & Garssen, 2002).

In short, in this dissertation fertility is studied in a context of high family planning and late average childbearing, where the great majority of children is born within cohabitational or marital unions and where two-child families are popular.

1.3 Social interaction and fertility

As was set out in section 1.1, this study examines fertility behaviour in the context of social interaction within the family and the partner relationship, based on a linked lives perspective. In this section we present a brief theoretical outline of how fertility could be affected by social interaction.⁴ In sections 1.4 and 1.5 we will elaborate on this in more detail.

It is often theorized that people base their fertility decisions on their preferences and constraints (Turchi 1975; Easterlin, Pollak, & Wachter, 1990; Becker, 1991). Some authors frame it differently and state that (fertility) preferences are influenced by constraints (McRae, 2003; Engelhardt, 2004). Hence we might say that people have preferences in which they do not take into account constraints, and preferences in which constraints are taken into account. The first might be more ideal, the latter more realistic. Economic theories of fertility usually focus on constraints in the form of direct monetary costs and opportunity costs of children (Becker, 1991). We argue that preferences and constraints regarding having children are also affected by social interaction within families and couples.

Early in life, the type of family an individual grows up in – the composition of the family and the nature of the relationships between the family members – is likely to

⁴ The concept of social interaction has been used before in the fertility literature, but in the macro-context of fertility transitions of societies or other groups of people (Montgomery & Casterline, 1993, 1996; Bongaarts & Watkins, 1996; National Research Council, 2001). The basic meaning of social interaction in these writings is that the likelihood of change in an individual's fertility-related knowledge and behaviour is affected by the changes in behaviour of other people in the group, i.e. these studies are about the diffusion of new childbearing behaviours through social interaction. The authors argue that through social interaction within their network, people obtain information that is new to them, for example about the costs and benefits of having (more) children, or about contraceptive technology, which might influence their fertility preferences and behaviours. Also, social interaction provides possibilities for people to constrain others' fertility choices, for example through normative pressure. Kohler (2000) uses a broader definition of social interaction in the context of fertility: social interaction as the phenomenon that an individual's fertility behaviour depends on macro-level conditions.

influence his or her preferences to have few or many children, to have them early or later in life, or not to have children at all. Once the individual has grown up, constraints on fertility decisions can also emerge from the family of origin, for example in the form of social pressure to conform to the parents' or siblings' fertility norms, or by way of financial support or potential help with childcare. Although we touch upon such constraining family aspects in this study, our focus lies on the effect that the family of origin exerts through formation of fertility preferences based on early family life experiences.

Social interaction in the partner relationship may influence fertility preferences or form constraints. If a person has already formed a desire for children, we can consider the quality of the partner relationship as a constraint. A very basic question that person might ask him- or herself is: "Do I want children with this partner?" This may depend on background characteristics of the partner, such as religion or socio-economic status, but also on the social interaction within the relationship. A happy and stable relationship might be seen as a condition for realizing one's child wishes. Second, the childbearing preferences of one partner can be considered as a constraint for realizing the other partner's preferences, since each partner's preferences are likely to play a role in the decision of whether and when to have children (Thomson, McDonald, & Bumpass, 1990; Sobel & Arbinger 1992; Thomson, 1997; Thomson & Hoem, 1998). Besides forming a constraint, the social interaction in the relationship could also influence fertility preferences: a desire to have children might emerge from a happy relationship, or from the other partner's desire for children.

1.4 The family of origin

The idea that lives of children are linked to those of their parents is not new in the study of fertility. A large number of studies focused on intergenerational transmission of number of children (Pearson & Lee 1899; Berent, 1953; Duncan et al., 1965; Johnson & Stokes, 1976; Zimmer & Fulton, 1980; Anderton, Tsuya, Bean, & Mineau, 1987; Murphy & Wang, 2001) and, recently, the transmission of age at first childbirth has also been addressed, although mainly by studying the transmission of teenage motherhood (Manlove, 1997; Barber, 2000). To explain the positive correlation between fertility patterns across successive generations that is found in these studies, the literature usually points to the importance of socialization processes, such as observational learning (Murphy & Wang, 2001) and transmission of values and preferences (Thornton, 1980; Barber, 2000). Other studies have examined the influence of the social status of parents on their children's childbearing patterns. Depending on the education or career track of the parents, different life goals, such as family formation or career, may be emphasized within families. The religious context during upbringing may also influence fertility ideas (Pearce, 2002) and behaviours.

We argue that there are additional socialization mechanisms through which people's fertility behaviour can be influenced by their family of origin: experiences of

family life in general might also form the children's fertility values and preferences. Positive experiences of family life may lead to a "taste for family", making people more inclined to start a family of their own, whereas negative experiences may discourage childbearing. Based on this comparatively new theoretical idea, we extend the literature on the influences of the family of origin on fertility behaviour by not only taking into account family characteristics such as the number of siblings one grew up with, the age at which one's parents had their first child, or social status of the family of origin, but also the nature of the interaction within the nuclear and the extended family, such as degree of conflict between parents and degree of contact with non-residential family members. We study the effect of these family characteristics on two aspects of childbearing: age at entry into parenthood and final number of children. This enables us to see to what extent timing and quantum of fertility are embedded in the family of origin in the same way.

1.5 The partner relationship

1.5.1 It takes two...

The focus in the previous section was on the role of social-emotional characteristics of family life during childhood in childbearing behaviour. We argued that the nature of relationships within the family during youth might produce a taste for family that may still be important later in life, influencing when one wants to have children and how many. Yet, by the time people decide about having children, another relationship has become prominent: the partner relationship. After all, the decision to have children is usually taken within a partner relationship. Although the concept of linked lives was originally most often used in the context of parents and their children, the life courses of partners are obviously interdependent too. Moreover, this interdependency of partners may have become more problematic over the last decades as a consequence of the decline of traditional certainties in relationships between men and women (Van der Avort, 1987; Liefbroer, 2007). The independency of partners is especially salient when it concerns having children. Not only does a new baby have important consequences for both partners, making their lives even more interdependent, but for a birth to happen they also depend on each other. This is obvious because it literally takes two to have a child, and preferably both partners will agree on it, but also because when individuals think about having a first or additional child, they are likely to consider features of their partner and their relationship.

1.5.2 The influence of partner relationship quality on fertility

Although the majority of studies into the determinants of fertility timing and quantum have focused on women's characteristics, some previous studies have taken into account characteristics of both partners, for example their educational attainment (Sorenson, 1989), labour market status (Andersson & Scott, 2007), religious characteristics (Marcum, 1986; Krishnan, 1993), partner homogamy on such characteristics (Corijn, Liefbroer, & De

Jong Gierveld, 1996; Liefbroer, 2007), or their division of household work (Mills et al., 2008). Studies have also focused on the influence of both partners' fertility preferences or intentions on their childbearing outcomes (Coombs & Chang, 1981; Morgan, 1985; Thomson et al., 1990; Thomson, 1997; Thomson & Hoem, 1998). Generally, such studies find that men's and women's preferences or intentions are equally influential. Besides socio-economic or religious characteristics and childbearing preferences of both partners, the interaction between the partners itself is likely to be important. It is suggested that partners place ever more emphasis on the emotional side of the relationship (Dykstra & Komter, 2006). Still, the influence of relationship quality on childbearing has been largely ignored by scholars thus far. As far as the issue is addressed, attention is paid to one aspect of relationship quality, namely stability.

People might consider the quality of their relationship when thinking about having (more) children for several reasons. First, because the quality of the partner relationship is likely to affect the well-being of the future child. People might only want to have a child in a good (or good enough) relationship, because interparental conflict or divorce may damage a child (Amato & Keith, 1991; Furstenberg & Cherlin, 1991; Amato, Loomis, & Booth, 1995).

Second, they might consider the quality of their relationship, because they think about their own future; the costs of separation or divorce are higher when children are involved. People might be afraid to be left behind with the sole responsibility for the care of the children after a separation (particularly women), or to lose contact with their children (particularly men). Especially now that divorce is common, this is likely to make relationship quality an important consideration for people in childbearing matters.

Third, people might take into account the current condition of their relationship, because they expect that having a child will have positive or negative consequences for the quality of that relationship. Studies have shown that some people expect that having a child will benefit their partner relationship (Hoffman & Manis, 1979; Bulatao, 1981; Callan, 1986; Liefbroer, 2005), but also that some people expect negative consequences (Callan, 1986; Carmichael & Whittaker, 2007).

In two studies we examine several aspects of the influence of partner relationship quality on childbearing, using different datasets (see section 1.6). We start from opposite hypotheses on the direction of the influence of relationship quality on fertility. This influence could be positive because people take into consideration the well-being of the future child as well as their own costs of separation. The influence could also be negative, because people might have children in order to improve a not so good relationship. We also examine which dimensions of relationship quality are relevant. Based on findings of this research, in a subsequent study we also test whether the relationship is curvilinear: are medium-quality relationships most prone to childbearing? People may want their relationship to be good enough to have children, but those who are very satisfied in a relationship might see having a child as a threat to this happiness, and therefore refrain from or postpone having a first or an additional child. In this study we additionally address

a gender issue: are men's or women's views on relationship quality equally influential, or is the influence gendered?

1.5.3 Couples' decision-making processes on having a first child

In the previous sections, we argued that by taking into account relationships with significant others throughout the life course, and more specifically the – so far overlooked – nature of the interaction within these relationships, we can widen the understanding of people's fertility decisions. Yet, we will also study these decision processes themselves. The vast majority of fertility studies is quantitative and focuses on fertility outcomes and their determinants; the decision process itself has received much less attention. To study *how* people decide whether and when to have children, qualitative research is appropriate. Using this type of research one can try to reveal what is important to people in deciding about having children, what dilemmas they face, and whether they are aware of the influence of certain factors.

Studies that do focus on the decision to have children usually only included either women (Den Bandt, 1982; Gerson, 1985; Van Luijn, 1996; Sevón, 2005) or, to a much lesser extent, men (Jacobs, 1995; Von der Lippe & Fuhrer, 2004; Knijn, Ostner, & Schmitt, 2006). Yet, since partners have to reach a decision about whether and when to have children together, we include both partners. By doing so, we can shed more light on how fertility decisions are embedded in the linked lives of partners: how do people take into account their partner's circumstances, how do they balance their own interests and those of their partners, how do they deal with disagreement?

Authors like Giddens (1991, 1992), Beck (1992) and Beck-Gernsheim (Beck & Beck-Gernsheim, 1995, 2002) emphasize the importance of choices in modern individualized societies. They assume that these choices complicate partner relationships, and that therefore couples currently need more planning and negotiation than before. In other words, couples' decision-making is supposed to be more explicit nowadays (Van der Avort, 1987). We apply this theoretical framework to empirically investigate an important life choice; that of having a first child. In studying this decision-making process, we focus on the arguments that are important to each partner during the decision process on whether and when to have the first child, and on to what extent this process is implicit or explicit (Sillars & Kalbflesch, 1989): do partners think extensively about it, do they plan in advance and in relation to other life goals, and to what extent do they communicate about it? Whereas Giddens seems to suggest that explicit decision-making is a central feature of our times, one could wonder whether postponed first births are more typically preceded by a long and extensive decision-making process than early first births. Therefore, we compare the decision-making process of couples who had their first child at a relatively young age and couples who did so at a relatively older age.

1.6 Data sources

This study is based on quantitative and qualitative data from the Netherlands Kinship Panel Study (NKPS; Dykstra et al., 2005, 2007) and the Panel Study on Social Integration in the Netherlands (PSIN; Liefbroer & Kalmijn, 1997). The NKPS is a large-scale panel survey on family relations in The Netherlands. The study has a prospective, longitudinal design; the same respondents are interviewed at successive points in time. Two measurement waves have been conducted so far. The first wave took place 2002 and 2003. Information was gathered from a random address sample of 8,161 primary adult respondents residing in private households in the Netherlands. The respondents were aged 18 to 79 at the time of the interview, covering birth cohorts between 1923 and 1986. The overall response rate for measurement Wave 1 was 45%, which is about average for family studies in the Netherlands (Dykstra et al., 2005). In a face-to-face interview primary respondents were questioned about their life course retrospectively, their life situation today, and relationships with family members. Additionally, respondents filled out a self-completion questionnaire. The second wave was conducted in 2006 and 2007. The response rate of Wave 2 – calculated as the percentage of Wave 1 respondents who completed the Wave 2 interview – was 73.8. The NKPS has a multi-actor design; if the primary respondents gave permission, a selection of persons from the family network were sent a self-completion questionnaire. In this dissertation we only use information reported by the primary respondent and the partner. The response rate of the partners in Wave 1 was 72%.

To investigate Research question 1, concerning the influence of the family of origin on fertility, we use NKPS data from Wave 1. The data are suitable for answering this question, because they contain a lot of information about the respondent's family situation during youth, which is asked in retrospective. To study the influence of relationship quality on fertility we use prospective data. First we use PSIN data (see below), and to further study the topic we use NKPS data from Wave 1 and Wave 2. We use reports on the quality of the partner relationship from the NKPS respondents as well as their partners at Wave 1 to examine the chance of a birth between Waves 1 and 2.

We also examine the influence of partner relationship quality on fertility using data from the PSIN. This survey was designed to follow the process of social integration of young adults within the crucially important life domains of living arrangements and family formation on the one hand, and education and occupation on the other. Like the NKPS, the PSIN has a longitudinal design; the study consists of six waves of data collection (1987–2006) among a sample of Dutch young adults. We used Waves 1, 3 and 4, which were conducted in 1987, 1991 and 1995. In 1987, a random sample of Dutch men and women born in 1961, 1965 and 1969 was drawn. Hence respondents were aged approximately 18, 22 and 26 at the time of Wave 1. The sample was stratified according to birth cohort and gender. A total of 1,775 interviews was conducted in Wave 1. The response rate was 63.4%. In the third wave 70.9% of the original sample and in the fourth

wave 54.2% of the original sample participated. Data were collected using a combination of face-to-face interviews and additional self-administered questionnaires.

Relationship quality was reported by one partner (man or woman) and measured in the same way at Waves 1 and 3, so we used these measures to study the influence of relationship quality on childbearing between Waves 1 and 3 and Waves 3 and 4. Using PSIN and NKPS data, we can test the influence of relationship quality on childbearing with different operationalizations of that concept.

The survey data of the NKPS were supplemented with small-scale in-depth studies on specific family-related topics (so-called “minipanel”). We collected the qualitative data to study couples’ decision-making processes on having children within this scope. The 33 couples that participated in this study were selected from Wave 1 of the NKPS. Half of them had their first child at a relatively young age (woman 25 or younger) and half of them at a relatively old age (woman aged 33 or older). They were interviewed retrospectively about the decision-making on each of their children as well as their current ideas about having another child in the future. In this dissertation, we limit ourselves to the study of decision-making on the first child. The main part of the interview was a couple-interaction interview: a face-to-face, semi-structured interview with both partners. We included both partners because they may have experienced the decision-making about their first child differently. Besides, the interaction of the partners during the interview can result in a fuller account of the topic (Allan, 1980). The couple-interaction interviews were supplemented by short questionnaires completed by each partner individually.

1.7 Outline of the dissertation

The research questions introduced in the present chapter are answered in the four empirical chapters of this dissertation (chapters 2 to 5). Chapter 2 addresses Research question 1 by examining influences of the family of origin on fertility behaviour, using data from Wave 1 of the NKPS. We take into account demographic characteristics and the social status of the family of origin, and most importantly, experiences of family life during childhood and early adolescence. We study effects on the age at first birth and on final number of children.

From relationships within the family network during youth, we move on to a very important relationship later in the life course: the partner relationship. Research question 2a, on the influence of relationship quality on childbearing, is investigated in chapters 3 and 4. In chapter 3 we use prospective PSIN data to study the effect of several dimensions of relationship quality – positive and negative partner interaction, value consensus and separation proneness – on the likelihood of a first or a higher-order birth, while concentrating on the direction of these effects. In chapter 4 we further examine the direction of the effect of relationship quality on the likelihood of first or second births, based on the outcomes of chapter 3. We use alternative prospective data from the NKPS, which provide us with measures of partner support, partner conflict and overall

relationship quality. Advantage is also taken of the fact that this dataset includes reports on relationship quality from both partners, which enables us to study fertility outcomes when the perceptions of partners on the relationship quality diverge.

Chapter 5 addresses the embeddedness of fertility in the partner relationship from a broader perspective, by reporting on a qualitative study of the decision-making process itself. Besides examining the social interaction between the partners during this process, we also pay attention to the formation of each partner's individual fertility preferences, and to motives and arguments that were important to the partners in the decision-making.

Chapter 6 summarizes and discusses the main findings and conclusions of this study. We evaluate its contribution to the fertility literature and end with suggestions for future research.

Readers should note that chapters 2 to 5 were written in the form of journal articles, thus intended to be read individually. This makes a certain degree of overlap between them, as well as between chapter 1 and the remainder of the dissertation, unavoidable. Furthermore, in this Introduction we have focused on what unites the empirical chapters. However, each chapter also covers aspects that are not discussed (extensively) in this Introduction, but which make each of the articles more complete.

Chapter 2

Influences of the family of origin on the timing and quantum of fertility

This chapter is co-authored by Aart C. Liefbroer (Netherlands Interdisciplinary Demographic Institute and Free University Amsterdam). A slightly different version of this chapter is published as: Rijken, A. J., & Liefbroer, A. C. (2009). Influences of the family of origin on the timing and quantum of fertility in the Netherlands. *Population Studies*, 63, 71–85. Earlier versions were presented at the international conference of the Centre for Research on Families and Relationships, June 2007, Edinburgh (UK) and at the annual meeting of the Population Association of America, April 2008, New Orleans, LA (USA).

2.1 Introduction

The influence of the parental home on people's family-related behaviour is a well-established fact in social science (Thornton, 1980). With regard to fertility behaviour, many studies have found a positive correlation between the numbers of children of successive generations (see section 2.2 for references). Similarly a positive relationship between parents' and their children's age at first birth has been found (among others: Manlove, 1997; Barber, 2000), although this subject has been studied less often.

To explain the positive correlation of fertility patterns across successive generations, the literature usually points to the importance of processes of socialization, such as observational learning (Murphy & Wang, 2001) and transmission of values and preferences (Thornton, 1980; Barber, 2000). However, socialization does not operate only through the direct transmission of fertility behaviours and attitudes from parents to children. The latter's preferences and behaviours in the realm of family formation are also likely to be influenced by the experiences of family life within the kinship network in which they are reared. Features of family dynamics, such as conflicts between parents or frequent contact with non-residential relatives, produce positive or negative experiences of family life, experiences that might subsequently influence fertility preferences and behaviour by increasing or decreasing children's "taste for family". Thus it might be expected that people who had positive experiences of family life during their upbringing are more eager to create a family of their own – they might want to have more children and have them at a younger age. Another possibility is that people with positive experiences of family life during their upbringing would be more inclined to produce a family like their parental family. In addition, the wider social context in which children are reared may also influence their subsequent fertility preferences and behaviour, because children are exposed to the opinions dominant in the socio-economic and cultural circles to which the family of origin belongs.

Against this background, the aim of our study was to examine the extent to which fertility behaviour of children is influenced by characteristics of their family of origin. More specifically, we focused on the role played by (a) direct intergenerational transmission of fertility behaviour, (b) family experiences within the kinship network, and (c) the wider social context of the family of origin. By doing so, we believe we have added to existing knowledge in several ways. We have extended the socialization perspective that focuses on intergenerational transmission of fertility behaviour by including experiences of family life that people have in early adolescence, and by examining the influence of the wider social context in which the child is reared. In studies of the intergenerational transmission of fertility, socio-economic and cultural characteristics of the parents or children have sometimes been taken into account as control variables, but we incorporated them into our theoretical framework as well. In addition, we studied both age at first birth and number of children of successive generations, in order to give a broad picture of how the family of origin influences fertility; we were able to investigate whether certain characteristics of

the parental family influence only the timing of first birth or the final number of children, or both.

To study these issues we used data from the first wave (2002–2003) of the Netherlands Kinship Panel Study. We conducted event history analyses to study effects on the timing of first birth and Poisson regression analyses to study effects on total number of children.

2.2 Theory and previous research

Processes of socialization are important mechanisms by which the family of origin may influence people's fertility behaviour. Previous research has focused on the way people's fertility behaviour was influenced by their parents' fertility behaviour and underlying values. Numerous studies in different time periods and countries have revealed a positive correlation between number of siblings and number of own children (among others: Pearson & Lee, 1899; Berent, 1953; Duncan et al., 1965; Johnson & Stokes, 1976; Zimmer & Fulton, 1980; Anderton et al., 1987; Murphy & Wang, 2001). Fewer studies have examined whether there is also a positive correlation between age at first birth of parents and that of their children. Most studies on this issue have focused on the intergenerational transmission of teenage motherhood (Furstenberg, Levine, & Brooks-Gunn, 1990; Horwitz et al., 1991; Kahn & Anderson, 1992; Manlove, 1997) and have shown that children of very young mothers have a higher risk of having their first child at a young age. The studies by Barber (2000, 2001) and Steenhof and Liefbroer (2008) were not limited to teenage births and also included men. These studies indicated a positive correlation between parents' and their children's age at first birth.

These intergenerational continuities in fertility behaviour are usually explained by a number of socialization-related mechanisms. Growing up in a family with many siblings may lead to a preference for producing a large family (Murphy & Wang, 2001; Murphy & Knudsen, 2002). In the same way growing up with young parents may lead to a preference for becoming a parent at a relatively young age oneself. In addition, children's fertility behaviour might be influenced by their parents' fertility values and preferences (Axinn, Clarkberg, & Thornton, 1994). The assumption of these studies is that the fertility behaviour of the parents reflects their values and preferences, and that the transmission of these to their children will lead to positive relationships between parents' and children's fertility patterns (Hendershot, 1969; Thornton, 1980; Barber, 2000). Besides the transfer of values, social pressure to behave according to the fertility norms of one's parents may also play a role. Furthermore, during socialization parents may transmit knowledge about and attitudes towards the use of birth control to their children (Thornton, 1980; Anderton et al., 1987). Finally, siblings may influence childbearing because their childbearing behaviour functions as an example (Axinn et al., 1994; Powers & Hsueh, 1997; Powers, 2001) and because the existence of kin support makes childrearing easier (Murphy & Wang, 2001). The mechanisms sketched above, predicting transmission of fertility behaviour from one generation to the next, lead to the following hypotheses:

H1a) The younger the parents at first birth, the younger their child at first birth.

H1b) The larger the number of siblings, the larger the number of own offspring.

To be able to disentangle intergenerational transmission of birth timing and number of children, we also examined the influence of number of siblings on the timing of first birth and the influence of parents' ages at first birth on the child's number of children.

Fertility preferences might also be influenced by the family of origin in more complex ways. For instance, Axinn and Thornton (1996) suggested that the divorce of parents leads to a more general negative attitude towards marriage and family life among both parents and their children and therefore reduces the children's desire for children of their own, a proposition supported by their findings. Similarly, Larson, Benson Wilson, and Medora (1998) showed that children's feelings and attitudes towards marriage are more likely to be negative if their parents have a troubled relationship than if they have a good one. One could assume from these studies that, by installing a strong taste for family, positive experiences of family life during a child's upbringing can lead to higher fertility. A high degree of conflict between parents or a divorce when the children are young, is likely to result in negative feelings about family life among the children, and consequently in later and lower fertility.¹

Feelings about family life might also be influenced by contacts outside the nuclear family, in particular with other members of the broader family network. For instance, Bengtson (2001) emphasized the important role that grandparents play in the socialization of their grandchildren. Although intensive family contacts might also have negative aspects, we assume that intensive contact with extended family members generally leads to more positive feelings towards family life and thus to higher fertility preferences. Hence, we formulate Hypotheses 2a and 2b:

H2a) The more positive the experiences of family life in early adolescence, the younger the child at first birth.

H2b) The more positive the experiences of family life in early adolescence, the larger the number of the child's offspring.

The extent to which one had positive or negative experiences of family life in early adolescence might also influence fertility behaviour in an alternative way. We might expect that people who had positive experiences of family life would be more inclined to create a family like their family of origin than people who had negative experiences. A similar idea was formulated by Duncan et al. (1965), who proposed that whether a child has a satisfying or an unsatisfying experience in the family of origin affects whether the child attempts to recapture the earlier experience when building a family. Thus, instead of the main effects of family experiences predicted in Hypotheses 2a and 2b, this assumption predicts that experiences of family life in early adolescence interact with parents' age at first birth and with the number of children in the family of origin. Duncan

¹ A contrary proposition – that young people opt for early childbearing as a way of escaping from a negative home environment – seems unlikely to apply in the Netherlands, where teenage parenthood is very rare.

et al.'s suggestion that satisfaction with family of origin leads to a stronger influence of number of siblings on number of children received support from studies conducted in the 1960s and 1970s (Westoff & Potvin, 1967; Hendershot, 1969; Bumpass & Westoff, 1970; Johnson and Stokes, 1976), but does not seem to have received much attention in recent literature. However, Cunningham and Thornton (2006) found that attitudes towards marriage and its alternatives were more strongly transmitted from parents to children if the quality of the parents' relationship was high. Studies on intergenerational transmission of age at first birth did not include satisfaction with family. As an alternative to Hypotheses 2a and 2b, we propose:

H3a) The more positive the experiences of family life in early adolescence, the stronger the influence of parents' age at first birth on the child's age at first birth.

H3b) The more positive the experiences of family life in early adolescence, the stronger the influence of number of siblings on own number of children.

As well as being affected by parents' specific fertility behaviours and values and by more general experiences of family life in the kinship network, fertility behaviour might also be influenced by the wider social context of the parental family, in at least three different ways. First, the socio-economic and cultural grouping to which the parents belong might influence the children's fertility values and preferences. We assume that parents' educational level, whether the mother is employed, and whether the parents are religious during a child's upbringing have an effect. In families where parents are well educated or the mother is employed, life goals other than family formation, such as having a career, might be given more emphasis than they receive in families with less educated parents or non-employed mothers. Murphy and Wang (2001) found that the higher the parent's educational level, the fewer children their children have. Barber (2000) found that those whose parents' average educational level was high and whose mothers were employed when they were aged 15, were older when they had their first child than people with less educated parents and whose mothers were not employed. Michael and Tuma (1985) found that the higher either parent's education, the older was their child at first birth (for white men and women and black men), and that white women whose mothers were employed when they were aged 14, had their first child at a younger age. Finally, religious exposure during childhood might influence young adults' childbearing dispositions, since most religions encourage childbearing (Pearce, 2002).

A second way in which the social context of the parental family may influence their children's fertility behaviour is through parents' financial resources. Easterlin's hypothesis (1969) predicts that the number of children varies negatively with people's level of aspirations for material goods. Easterlin (1969) argued that because consumption aspirations can be assumed to develop in the parental home, parents' income affords a proxy for the children's consumption aspirations, leading to the prediction of a negative effect of parents' income or economic status on their offspring's number of children. Thornton (1980) found this negative effect, but Behrman and Taubman (1989) did not.

The same reasoning could be applied to age at first birth: if consumption aspirations are high, procreation will be postponed. Alternatively, it could be argued that, because parents' resources can help young adults to settle and start a family, parent's income will have a negative effect on their offspring's age at first birth and a positive effect on their offspring's number of children. A study by Knijn and Liefbroer (2006) showed that parents with higher incomes give more financial support than parents with lower incomes to their adult children.

Third, the influences of the socio-economic and cultural positions of the parental family could be indirect, since parents are likely to transmit these positions to their children. For example, Pearce (2002) found that children of mothers who frequently attended religious services were more pronatalist than the children of mothers who attended them more rarely, but she also found that this effect operated entirely through the young adult's own religious participation and the importance he or she attached to religion. As another example: the negative effect of parents' financial status on (expected) number of children found by Thornton (1980), was mediated through the second generation's educational level. However, there is also evidence that parent's social status has an independent effect on the child's fertility: the negative effect of parent's education on children's number of offspring found by Murphy and Wang (2001) remained after controlling for the child's educational level. In general we expect:

H4a) The socio-economic status and cultural position of the family of origin influence the child's age at first birth.

H4b) The socio-economic status and cultural position of the family of origin influence the child's number of offspring.

In Table 2.1 we summarize the effects we expected from the hypotheses presented above.

2.3 Method

2.3.1 Data

The data used in this study were from Wave 1 of the Netherlands Kinship Panel Study (Dykstra et al., 2005), a large-scale survey in the Netherlands of 8,161 men and women aged 18–79 from a random sample of addresses of private households. The data were collected in 2002 and 2003, using a combination of computer-assisted face-to-face interviews and additional self-administered questionnaires. The response rate was 45%, which is comparable to that of other large-scale surveys in the Netherlands (Dykstra et al. 2005). Response rates in the Netherlands are generally lower than those in other countries (De Leeuw & De Heer, 2001). Women, middle-aged respondents, and respondents with children in the household were overrepresented in the sample. A weight factor was constructed to correct for these discrepancies between the sample and the population. All analyses were performed on the weighted sample.

Table 2.1 Expected direction of effects of family-of-origin variables on age at first birth and number of children

	Age at first birth	Number of children
Parents' fertility behaviour (H1a and H1b)		
Parents' age at first birth	+	
Number of siblings		+
Family life experiences in early adolescence (H2a and H2b)		
Conflict between parents	+	-
Parents' divorce before respondent left the parental home	+	-
Contact with extended family members	-	+
Interactions between parents' fertility behaviour and family life experiences in early adolescence (H3a and H3b)		
Parents' age at first birth * Conflict between parents	-	
Parents' age at first birth * Parents' divorce	-	
Parents' age at first birth * Contact with extended family members	+	
Number of siblings * Conflict between parents		-
Number of siblings * Parents' divorce		-
Number of siblings * Contact with extended family members		+
Social status of the family of origin in early adolescence (H4a and H4b)		
Parents' educational attainment	+	-
Mother's employment status	+	-
Father's job status	+ or -	+ or -
Parents' religiosity	-	+

Note: For details on hypotheses see section 2.2.

The following categories of respondents were eliminated from the sample: the 8% who did not return the self-administered questionnaire; the 8% of the remainder who had half-siblings or stepsiblings; and respondents whose parents had never lived together, those who had their first child before the age of 16, and those whose mother or father had their first child before the age of 16. We were left with a sample of 6,630 respondents. The reason for removing respondents who had half-siblings or stepsiblings from the sample was that, because they were less likely to have been brought up together than full siblings, the transmission of fertility behaviour in their families may have differed from that in families with full siblings (Murphy & Knudsen, 2002).² For the analyses of effects on the number of children, we selected women aged over 40 and men aged over 45, because they were likely to have finished their childbearing period. In the dataset, only about 2% of women had children above age 40 and only 2% of the men had children above age 45. The resulting sample for the analyses of the effects on number of children comprised 3,736 respondents.

² Our data did not contain information on whether half-siblings ever lived in the same household as the respondents, or for how long co-resident stepsiblings shared households.

2.3.2 Variables

The dependent variables in the study were age at first birth and final number of children. Age at first birth was measured in years. For further explanation of the construction of the dependent variable in the hazard analyses, see subsection 2.3.3. The dependent variable in the analyses of number of children was defined as the number of natural children and adopted children, including deceased ones.

Next, we discuss the independent variables. Both mother's and father's age at the birth of their first child were included. Number of siblings was measured as the number of full and adopted siblings, excluding those who died in the first year of life or before the respondent turned 13 years of age. To have included siblings who died within 1 year might not have given a true reflection of the parents' fertility preferences or values, since after the death of a young child they might have gone on to have another child that they would not have had otherwise. Also, if a sibling had died when the respondent was young, the respondent would not have grown up with this sibling throughout his or her entire childhood. We used behavioural indicators for characteristics of family dynamics in early adolescence that might have caused the experience of family life to be negative or positive. The two variables used as measures of experience of family life in the nuclear family were the degree of conflict between the parents and whether they divorced. The degree of conflict between parents was measured by four questions, each referring to the time when the respondent was about 15 years old: "How often did your parents have heated discussions?", "How often did one of your parents put down and blame the other?", "How often did your parents not want to talk to each other for a while?", and "How often did arguments get out of hand?". Answers were coded as 1 (never), 2 (once or twice), or 3 (frequently), and we used the mean score for the analyses. Cronbach's alpha for this four-item scale was .78. Parents' divorce was defined as the divorce or separation of the parents, including the separation of unmarried parents, and was coded 1 if the parents divorced before the respondent left the parental home and 0 if the parents either did not divorce or divorced after the respondent left the parental home.

As an indicator of family life experiences within the extended family, we used the frequency of overnight family visits during the childhood of the respondent. It was measured by the following questions: "Did you ever go and stay with your mother's family when you were young (that is to say, until you were 15 years old)?" and "Did members of your mother's family ever come and stay with you when you were young?" These questions were repeated for the father's family. Answers were coded as 1 (never), 2 (occasionally), and 3 (frequently) and again we used the mean score.

As indicators of the socio-economic status and cultural position of the parental family, we used mother's and father's educational attainment, mother's employment status, father's job status (as a proxy for family income), and the religiosity of the parents, with all except mother's and father's educational attainment referring to the period when the respondent was (up to) about 15 years old. It seemed reasonable to assume that in most cases parents' educational attainment had changed little since the child was aged 15.

The variable was measured on a scale ranging from 1 (primary school not finished) to 10 (postdoctoral degree). We coded mother's employment status 1 if she had been employed outside the home for most of the respondent's childhood (until about age 15) and 0 otherwise. The respondent was asked about the father's occupation when the respondent was aged 15 (or younger if the father did not have an occupation at that time). These occupations were coded using the International Socioeconomic Index of Occupations (Ganzeboom, De Graaf, & Treiman, 1992), on which occupations are scored from 10 to 90. The measure of parents' religiosity was whether the respondent indicated that his or her parents counted themselves as belonging to a particular religious denomination when the respondent was aged 15. Since we had no reasons to expect large differences in fertility behaviour between Catholics and Protestants in the Netherlands (Statistics Netherlands, 2005), and since the number of parents with a non-Christian religion is so small (3.6% of the population), we decided to distinguish only between religious and non-religious. We created two dummies: both parents religious (1 = yes); one parent religious, one not (1 = yes).

We used sex (0 = male, 1 = female) and year of birth as control variables. The average age at first birth in the Netherlands decreased during the 20th century until 1970 and then increased, and the decrease in number of children has stagnated since the mid-1980s (Statistics Netherlands, 2007). We therefore also included year of birth squared in the analyses. Year of birth was centred at its mean to make the interpretation of its effects easier. We did not include information on the child's marital status in our models, for two reasons. First, the time-varying nature of marital status makes it difficult to include it in a meaningful way in the analysis of effects on number of children. Second, and more important, we felt that the decision to marry is highly endogenous to the decision to have children, and thus that including marital status as a covariate in our analysis of entry into parenthood might bias the estimates of other covariates in the model.

Our data on the situation in the family of origin are based on retrospective accounts. Given the potential recall bias inherent in such measures, caution is needed when working with them. It has been shown that recall of life events is quite good (Poulain, Riandey, & Firdion, 1992). Unfortunately, research on the validity of responses to retrospective enquiries about perceptions of earlier experience is scarce. In a study of the influence of psychological distress on the recall of childhood experience, Amato (1991) showed that correlations between ratings of childhood family characteristics over a 14-week period were quite stable – correlations over time on perceived marital quality of the parents and on perceived violence between the parents were .90 – and considerably more stable than reports of psychological distress. One of Amato's conclusions (1991) is that retrospective accounts of early family life can be used to explain relatively objective adult variables (like our dependent variables). Because recall of perceptions of family life in early adolescence might also be influenced by the adult child's perception of the quality of his or her current relationship with the parents, we included a measure of its current quality (if the parents were alive) in our models. Its inclusion did not change the effects of our

retrospectively asked questions about family-of-origin characteristics on age at first birth and final number of children.

2.3.3 Method of analysis

To examine family influences on the age at first birth, Cox regression hazard rate models were estimated with the hazard of first birth as the dependent variable. People were at risk from age 16 until the event (first birth) occurred. Time was measured as age in years. If respondents had not experienced a birth before the interview, they were censored at their age at the time of the interview or, if they were older than age 45 at that time, they were censored at age 45. Respondents older than age 45 at the time of their first birth were also censored at the age of 45. The average observation period was 13.0 years. Because men usually have their first child at a later age than that of women, the Cox regression analyses were stratified by sex. To examine family influences on the final number of children, we used Poisson regression analyses (see Murphy & Wang, 2001). A Poisson distribution represents the chance that an event (in our case, birth) will occur a certain number of times. Our data meet the assumption of the Poisson distribution: the mean number of children is equal to its variance. Poisson regression models were estimated using a selection from the sample that comprised women above age 40 and men above age 45. Analyses were performed using the *Stcox* and the *Poisson* procedures in *Stata* (StataCorp, 2005).

Table 2.2 Descriptive characteristics of the samples

	Sample for models of effects on age at first birth (<i>N</i> = 6,630)		Sample for models of effects of number of births (<i>N</i> = 3,736)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Number of children	1.60	1.48	2.25	1.46
Distribution of number of children	%		%	
0 children	33.64		13.72	
1 child	11.13		9.72	
2 children	30.88		39.82	
3 children	15.76		22.45	
4 children	5.51		8.75	
5 or more children	3.08		5.54	
Observation duration ^a	12.99	6.73		
Age at first birth (only respondents who had a child)	27.88	4.61	27.41	4.64
Parents' fertility variables				
Mother's age at first birth	25.53	4.20	26.00	4.43
Father's age at first birth	28.08	4.07	28.65	4.94
Number of siblings	2.94	2.40	3.64	2.67
Family life experience variables				
Degree of conflict between parents when respondent aged 15 ^b	1.44	0.48	1.41	0.48
Parents' divorce before respondent left parental home ^c	0.06	0.24	0.04	0.19
Frequency of overnight family visits during respondent's childhood ^b	1.77	0.51	1.78	0.54
Parents' social status variables				
Mother's educational attainment ^d	3.50	1.83	2.93	1.55
Father's educational attainment ^d	4.21	2.25	3.71	2.14
Mother's employment status during respondent's childhood ^e	0.18	0.39	0.14	0.35
Father's job status when respondent aged 15 ^f	46.45	15.64	44.39	14.93
Parents' religiosity when respondent aged 15	%		%	
Both parents not religious	17.13		13.87	
Both parents religious	75.80		81.65	
One parent religious, other not	7.08		5.48	
Control variables				
Sex ^g	.51	.50	.53	.50
Year of birth ^h	1957.36	15.80	1944.82	10.05

Notes: Parameters are weighted, *N*'s are unweighted.

^aYears. ^bScale: 1–3. ^c0 = no, 1 = yes. ^dScale: 1–10. ^e0 = not employed, 1 = employed. ^fScale: 10–90. ^g0 = male, 1 = female. ^hYear of birth was centred at its mean.

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

2.4 Results

2.4.1 Descriptive characteristics

In Table 2.2 we present the descriptive characteristics of the sample. In the sample for the analyses of age at first birth, 66.4% has had at least one child. The average age at first birth is 27.9, whereas the average age at first birth of the respondents' mothers is 25.5 years. In the sample for analyses of number of children, the respondents have on average 2.3 children. Their average number of siblings is 3.6. A very small percentage of the respondents experienced the divorce of parents before the age of 18. If we had included respondents with half-siblings and stepsiblings, this percentage would have been somewhat higher. Because the average age of the sample for analyses of effects on age at first birth is lower than that of the sample for analyses of number of children (which includes only women aged over 40 and only men aged over 45), the samples differ with regard to the parents' socio-economic and cultural characteristics, though they do so in line with expectations.

2.4.2 Age at first birth

The results of the multivariate Cox regression analyses are presented in Table 2.3. Note that a positive effect on the hazard of first birth implies a negative effect on age at first birth and that the coefficients are unstandardized. Model 1 shows first of all that, in line with Hypothesis 1a, the age of the mother and the age of the father at first birth negatively influence the hazard of the respondent's first birth, implying that the older the parents were at their first birth, the older is their child at first birth. The effects of mother's age and father's age at first birth are of about the same magnitude. Although we did not formulate a hypothesis about the effect of number of siblings on age at first birth, it turns out that there is an effect of number of siblings, in addition to the effect of the parents' ages at first birth: the more siblings a child has, the younger the adult child at first birth.

Next we look at the effects of the variables that refer to the respondent's experiences of family life in early adolescence. The degree of conflict between parents has a negative effect on the hazard of first birth; the more conflict between parents experienced by the child, the older the adult child at first birth. The frequency of overnight family visits has a positive effect; the more visits, the sooner the adult child's first child arrives. These findings support Hypothesis 2a. It is, however, not supported by the finding for having experienced parents' divorce before leaving the parental home since this does not influence age at first birth.

We now turn to the effects of the socio-economic status and cultural position of the family of origin. As expected, the more educated the mother and father, the more their child is likely to postpone parenthood, though the mother's education has a stronger influence than the father's. The higher the father's job status, the more his child postpones first birth. This might be considered to support the idea that growing up in a well-off family leads to higher consumption aspirations, leading in turn to postponement of

childbearing. Thus, the alternative assumption – that a father’s high job status leads to earlier childbearing by his children, because it means parents can help their children to afford childbearing – is not confirmed. Mother’s employment status and parents’ religiosity do not affect the timing of first birth. Thus, Hypothesis 4a is partly confirmed.

Table 2.3 Cox regression estimates of effects of family-of-origin variables on age at first birth ($N=6,630$)

	Model 1		Model 2	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Parents’ fertility				
Mother’s age at first birth	-0.012**	0.005	0.021	0.021
Father’s age at first birth	-0.015***	0.004	-0.047*	0.019
Number of siblings	0.023***	0.007	0.024***	0.007
Family life experiences				
Degree of conflict between parents when respondent aged 15 ^a	-0.092**	0.032	-0.241	0.120
Parents’ divorce before respondent left parental home ^b	-0.010	0.066	0.429	0.425
Frequency of overnight family visits during respondent’s childhood ^d	0.070*	0.028	0.138	0.159
Parents’ social status				
Mother’s educational attainment ^c	-0.055***	0.010	-0.055***	0.011
Father’s educational attainment ^c	-0.022*	0.009	-0.022*	0.009
Mother’s employment status during respondent’s childhood ^d	0.058	0.041	0.056	0.041
Father’s job status when respondent aged 15 ^e	-0.003**	0.001	-0.003**	0.001
Parents’ religiosity when respondent aged 15 (Reference category = Both parents not religious)				
Both parents religious	-0.036	0.042	-0.036	0.042
One parent religious	-0.028	0.069	-0.026	0.069
Interactions				
Mother’s age at first birth * Conflict between parents			-0.009	0.010
Mother’s age at first birth * Parents’ divorce			0.011	0.019
Mother’s age at first birth * Overnight family visits			-0.012	0.008
Father’s age at first birth * Conflict between parents			0.014	0.009
Father’s age at first birth * Parents’ divorce			-0.027	0.018
Father’s age at first birth * Overnight family visits			0.009	0.007
Control variables				
Year of birth ^f	-0.025***	0.002	-0.026***	0.002
Square of year of birth ^f	-0.001***	0.000	-0.001***	0.000
Log pseudo likelihood	-3,2095.0		-3,2092.4	

Note: Models are stratified by sex. Parameters are weighted, N is unweighted.

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

^aScale: 1–3. ^b0 = no, 1 = yes. ^cScale: 1–10. ^d0 = not employed, 1 = employed. ^eScale: 10–90. ^fYear of birth was centred at its mean.

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

To test Hypothesis 3a, which predicts that the more positive one's family experiences in early adolescence, the stronger the intergenerational transmission of age at first birth, we added the interaction terms of mother's age with conflict between parents, overnight family visits, and parents' divorce, and we added the same interaction terms for father's age. The results of these analyses are presented in Model 2 of Table 2.3. None of these interaction terms have an effect, nor do they have one when added to the model one at a time (results not shown). Thus Hypothesis 3a is not confirmed.

Finally, in both models year of birth and its square have a negative effect on the hazard of first birth. Given the coding scheme, this implies that across cohorts the average age at first birth first decreased and then increased.

2.4.3 Number of children

Table 2.4 shows the results of the multivariate Poisson models for the number of children of women aged over 40 and men aged over 45. Model 1 shows that number of siblings positively influences number of own children, confirming Hypothesis 1b. Mother's and father's age at first birth do not influence their children's number of children.

The degree of conflict between parents experienced in early adolescence has a negative effect on the adult child's number of children. An increase from the lowest score on conflict between parents (never any conflicts) to the highest score (frequent conflicts) is associated with a decrease in number of children by 14.3% ($(\exp -0.077)^2 = 0.857$). This finding supports Hypothesis 2b. Frequency of overnight family visits during early adolescence does not influence number of children, nor does parents' divorce before leaving the parental home. To test whether our decision to exclude respondents with half-siblings and stepsiblings from the analysis influenced these results, we reran our models for age at first birth and number of children with the respondents that have half-siblings and stepsiblings included in the samples. The results for the effects of parents' divorce and conflict between parents do not differ from those obtained with the more restricted sample.

We now turn to the effects of parents' social status and cultural position. We observe that the higher the mother's educational level, the fewer children the respondent has. If both parents were religious when the child was aged 15, the adult child has more children than if both parents were not religious, which is also in line with expectations. There is no difference in number of children between those who had one religious parent and those who grew up with two non-religious parents. Father's educational attainment, mother's employment status, and father's job status do not influence number of children. These results provide partial support for Hypothesis 4b.

We tested Hypothesis 3b – the more positive the experiences of family life, the stronger the effect of number of siblings on the adult child's number of children – by interacting number of siblings with conflict between parents, overnight family visits, and parents' divorce. The results of these analyses are shown in Model 2 of Table 2.4. None of these interaction terms is statistically significant. Nor are they significant when

added to the model without the other interaction terms. Thus, neither Hypothesis 3a nor Hypothesis 3b is supported by our study.

Finally, in both models year of birth has a negative effect and its square a positive effect on number of children, indicating that the number of children decreased across cohorts, but that the decrease was not linear.

Table 2.4 Poisson regression estimates of the effect of family-of-origin variables on number of children ($N=3,736$)

	Model 1		Model 2	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Parents' fertility				
Number of siblings	0.022***	0.005	0.020	0.014
Mother's age at first birth	-0.002	0.005	-0.002	0.005
Father's age at first birth	0.001	0.003	0.001	0.004
Family life experiences				
Degree of conflict between parents when respondent aged 15 ^a	-0.077**	0.026	-0.069	0.034
Parents' divorced before respondent left parental home ^b	0.056	0.054	0.016	0.080
Frequency of overnight family visits during respondent's childhood ^a	0.033	0.020	0.022	0.029
Parents' social status				
Mother's educational attainment ^c	-0.025**	0.009	-0.025**	0.007
Father's educational attainment ^c	-0.008	0.009	-0.008	0.009
Mother's employment status during respondent's childhood ^d	0.047	0.030	0.048	0.027
Father's job status when respondent aged 15 ^e	0.001	0.001	0.001	0.001
Parents' religiosity when respondent aged 15 (Reference category = Both parents not religious)				
Both parents religious	0.068*	0.028	0.069*	0.025
One parent religious	0.038	0.050	0.038	0.044
Interactions				
Number of siblings * Conflict between parents			-0.003	0.008
Number of siblings * Parents' divorce			0.014	0.012
Number of siblings * Overnight family visits			0.003	0.006
Control variables				
Sex ^f	0.006	0.027	0.006	0.021
Year of birth ^g	-0.008***	0.001	-0.008***	0.001
Square of year of birth ^g	0.000**	0.000	0.000**	0.000
Constant	0.731***	0.102	0.740***	0.112
Log pseudo likelihood	-6,360.32		-6,350.07	

Note: Parameters are weighted, N is unweighted.

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

^aScale: 1–3. ^b0 = no, 1 = yes. ^cScale: 1–10. ^d0 = not employed, 1 = employed. ^eScale: 10–90. ^f0 = male, 1 = female.

^gYear of birth was centred at its mean.

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

2.4.4 Sex differences in transmission patterns

Up to this point, we used the assumption that the family of origin has the same influence on both sons and daughters. However, it has been argued that daughters may be more strongly affected than sons by their family of origin, since daughters have stronger bonds with their family as adults (Horowitz, 1985; Moore, 1990), though this does not necessarily imply that daughters are also more strongly affected by their family during childhood. To examine this issue, we tested the interaction effects of the family-of-origin variables with sex of respondent (results are available upon request from the first author).

In the analysis of the number of children, we do not observe statistically significant interaction effects between family-of-origin characteristics and sex of respondent, suggesting that with regard to fertility quantum, sons and daughters are influenced by their family of origin in the same way. With regard to the timing of first birth, most interactions between family-of-origin variables and sex are not statistically significant either, with two noticeable exceptions. First, we find that mother's age at first birth influences daughter's age at first birth, but not son's. The interaction of father's age at first birth and sex of respondent does not have a significant effect, implying that father's age at first birth influences daughters as well as sons. Second, whereas the main effects of parents' religiosity on age at first birth are not statistically significant, the interaction terms with sex of respondent show that sons who grew up with one or two religious parents do not differ in their timing of first birth from sons of non-religious parents, but that, unexpectedly, daughters with two religious parents tend to postpone the birth of their first child.

2.4.5 Mediating processes

When studying the effects of the social status of the family of origin on fertility, it would be interesting to know to what extent these effects are mediated by the child's own social status achieved as an adult. We did not include socio-economic and cultural characteristics of the respondent in our main models, because they were measured at the time of the interview and might have changed since the period of childbearing; if so their effects on fertility would have been overestimated (e.g., see Kravdal, 2007). However, to get some indication of whether the characteristics of the family of origin on fertility have independent effects or whether the effects are mainly a by-product of transmission of social status, we also ran our models with the respondent's education and religiosity included. Not surprisingly, we find that more educated people postpone their first birth. This effect is stronger for women than for men. More educated women also have fewer children, but this is not true for more educated men. Religious people have their first child earlier and have more children than non-religious people, and these effects do not differ by sex.

Including the respondent's own social status has little consequence for the effects of the family-of-origin variables. The effects of parents' fertility and of the experiences of family life during early adolescence do not change. The same is largely true for the effects

of mother's education on age at first birth and on number of children; these effects remain significant and are reduced in size by only about one fifth, once the child's education is taken into account. However, there are also indications that some of the effects of the social position of one's family of origin are mediated by one's own social position. The effects of father's education and job status on the adult child's age at first birth disappear, and the positive effect of parents' religiosity on the child's number of children even becomes negative. Finally, in the model for number of children, a significant positive effect of father's job status appears when the child's education is taken into account, which suggests that (expectations of) financial support from parents facilitates having more children. However, as Table 2.3 shows, this does not lead to earlier childbearing.

2.5 Conclusion and discussion

With regard to influences of the family of origin on fertility behaviour, the literature has focused mainly on direct transmission of fertility behaviour from parents to their children. We tried to generate new insights by also taking into account family experiences within the kinship network, and the socio-economic and cultural context of the family of origin. Moreover, we studied two aspects of fertility behaviour: age at first birth and final number of children. We now summarize and comment on our findings.

Our Hypotheses 1a and 1b – that age at first birth and number of offspring are positively related between generations – were confirmed. The effects of parents' age at first birth on the adult child's age at first birth and of number of siblings on number of children remain even after controlling for more variables than are usually controlled for in other studies. In addition we find that daughter's age at first birth is influenced by her mother's and father's ages at first birth, while son's age at first birth is influenced only by father's age at first birth. Most studies investigated only the transmission from mothers to their children, and suggested that the transmission from mothers to daughters was somewhat stronger than that from mothers to sons (Furstenberg et al., 1990; Horwitz et al., 1991; Barber, 2001). These findings correspond with ours, but we find also that the influence of mothers on sons disappears when the influence of fathers is taken into account. We do not find sex differences in the effect of number of siblings on number of children, which is in line with the findings of Murphy and Knudsen (2002).

We find that positive experiences of family life in early adolescence lead to earlier childbearing and to having more children, which supports Hypotheses 2a and 2b. The experience of conflict between parents results in postponement of the first child and in having fewer children. It is striking that conflict between parents seems to have more of an effect than parents' divorce, suggesting that the fertility behaviour of the child is influenced by negative experiences in the parental home even when parents do not divorce. This result is in line with Fischer's findings (2004) on the impact of parents' divorce on other outcomes for the child. Her study showed that parents' divorce has almost no impact on a child's problematic behaviour and educational career once the level

of marital conflict is taken into account. This, of course, is not to suggest that divorce does not affect fertility levels, but that, at least in the Dutch case, it might do so by influencing the fertility level of the parental generation rather than that of the children's generation.

The finding that conflict between parents leads to postponement of childbearing might be considered surprising, because in contrast to our hypothesis it could be argued that the experience of conflict between parents could lead to the child leaving home early and embarking on childbearing early to escape from the home environment. However, most studies of this issue tested the likelihood of premarital motherhood (McLanahan & Bumpass, 1988; Russell, 1994; Barber, 2001) or teenage motherhood (McLanahan & Bumpass, 1988; Kiernan & Hobcraft, 1997), which is rare in the Netherlands. Further, these studies usually tested the effect of divorce or living in a single-parent family, which could lead to teenage childbearing owing to a lack of supervision (Hogan & Kitagawa, 1985; Barber, 2001), rather than the effect of conflict between parents.

Experiences in the extended family in early adolescence also appear to matter for fertility behaviour, but they affect fertility timing rather than quantum: children from families with many overnight family visits start childbearing earlier, but do not have more births. Given that we have only limited information on experiences of the larger family network, it could well be that these effects of the extended family are even stronger than we have found. A better assessment of these effects would require the use of better information on family experiences, such as contact frequency and number and types of conflict within the extended family.

As an alternative to Hypotheses 2a and 2b, we suggested that positive experiences of family life in early adolescence strengthen the influence of parents' fertility behaviour on that of their children (Hypotheses 3a and 3b). These hypotheses were not supported. Earlier studies had found support for the idea that satisfaction with family life leads to a stronger influence of number of siblings on number of children, though the methods used by some of these earlier studies had limitations. Johnson and Stokes (1976), however, used a panel design and found that women's satisfaction with family life at age 16 positively influenced the strength of the effect of number of their siblings on their completed fertility. A potential explanation for the difference in findings between their study and ours is that satisfaction with family life is an evaluative indicator of experience in the parental family, whereas we used more objective indicators. Cunningham and Thornton (2006) found that high quality of the parents' marriage, as reported by mother and child, strengthens intergenerational transmission of attitudes towards marriage. This might also be considered as being inconsistent with our results, but it seems reasonable to suppose that marital quality is more directly related to attitudes towards marriage than to fertility behaviour.

As well as experiences of family life in the kin network, the wider social context of the family of origin is also important in shaping fertility behaviour. A number of indicators of the socio-economic and cultural characteristics of the family of origin influence the timing of first birth as well as number of children, confirming Hypotheses 4a and 4b. The

higher the mother's and father's educational attainment and the father's job status, the more their children postpone the first birth. In addition, mother's education negatively influences her children's number of births. We also find that the effects of mother's educational level on her children's age at first birth and number of children are largely independent of the transmission of social status, while the effects of father's education and job status are completely mediated by the child's educational attainment. People who grew up with religious parents have more children than children of non-religious parents, but this effect of parents' religiosity on number of children becomes negative after controlling for the child's religiosity, which itself has a positive effect on number of children. This suggests that non-religious children of religious parents not only have fewer children than children who "inherited" religiosity from their parents, but even have fewer than non-religious children of non-religious parents. A similar mechanism seems to occur with regard to the effect of parents' religiosity on daughter's age at first birth. It could be that a child's refusal to adopt the parents' religious values also has consequences for other aspects of lifestyle.

The study's principal findings show that, taken together, its innovative aspects have proved to be worthwhile. First, we have shown that experiences of family life in early adolescence influence fertility in a direct way. Second, we have shown that parents' socio-economic and cultural characteristics influence their children's fertility, and we tentatively conclude that at least mother's education affects the timing and quantum of fertility independently of the social status achieved by the child as an adult. Third, by taking into account age at first birth and number of children, we could show that experiences in the parental home influence both aspects of fertility partly along the same lines: the parents' fertility behaviour, the degree of conflict between them, and mother's educational attainment affect both the timing and quantum of fertility. Yet, frequency of contact with relatives influences only the timing of first birth, and parents' religiosity stimulates children's fertility only by increasing the final number of children.

We conclude by pointing to the kinds of data that would be required for future research to go beyond the limits of our study. First, instead of the relatively limited information available to us on the experiences people had of family life in early adolescence, it would be interesting to include information on relationships between the respondent and his or her parents and siblings. Second, to examine to what extent the effects of the parental family's social status on the child's fertility behaviour are mediated by the child's adult life status, it would be better to have panel data. Third, the influence of the family of origin on fertility behaviour does not cease when the child leaves the parental home. The size of the parental family and the quality of relationships within it could influence the adult's fertility if the existence of kin support makes childrearing easier (Murphy & Wang, 2001). The study of these issues requires longitudinal data about family relationships in adult life. Finally, like most investigators of the intergenerational transmission of fertility behaviour, we treated fertility as individual behaviour when it is

in fact couple behaviour. Owing to lack of data, we were not able to include characteristics of the parental family of both partners, but doing so would make a valuable addition to fertility research.

Chapter 3

The influence of partner relationship quality on fertility

This chapter is co-authored by Aart C. Liefbroer (Netherlands Interdisciplinary Demographic Institute and Free University Amsterdam). A slightly different version of this chapter is published as: Rijken, A. J., & Liefbroer, A. C. (2009). The influence of partner relationship quality on fertility. *European Journal of Population*, 25, 27–44. Earlier versions were presented at the European Population Conference, June 2006, Liverpool (UK) and at the conference of the International Association for Relationship Research, July 2006, Rethymnon (Greece).

3.1 Introduction

Most of the fertility literature studies the influence of individual characteristics, mostly women's, on the timing and quantum of childbearing. However, the great majority of children are born within couple relationships. Hence, it is important that the influence of characteristics of the couple on fertility decisions is studied as well. Indeed, in recent years increasing attention has been paid to the influence of characteristics of both partners and to couple characteristics (e.g., Coombs & Chang, 1981; Morgan, 1985; Thomson et al., 1990; Corijn et al. 1996; Thomson, 1997, 2002; Thomson & Hoem, 1998; Jansen & Liefbroer, 2006). Nevertheless, as yet little attention has been paid to the question to what extent fertility is influenced by the quality of the partner relationship itself. The literature that does pay attention to it focuses almost exclusively on one specific aspect of relationship quality, namely union stability (Koo & Janowitz, 1983; Lillard & Waite, 1993; Wu, 1996; Myers, 1997; Thomson & Henz, 2005). Yet, a vast social-psychological literature shows that marital quality is a multidimensional phenomenon. Besides perceived stability, it includes other evaluative dimensions such as relationship satisfaction, behavioural dimensions like disagreement and interaction (Johnson et al., 1986; Glenn, 1990), and value consensus (Spanier, 1976).

Although it is likely that relationship quality influences fertility decisions, it is unclear whether its influence is positive or negative. Couples with a high-quality relationship might be more likely to have children, because their relationship constitutes a favourable environment to raise a child (Myers, 1997) and because they are more willing to make the major joint investment that having children implies (Lillard & Waite, 1993). However, couples in a low-quality relationship might want to have a child in order to revitalize their union. The aim of this article is to contribute to the explanation of fertility behaviour by addressing the question whether the quality of the partner relationship influences the timing of fertility, and if so, what aspects of relationship quality are of particular relevance. This latter question is explorative.

We expand on the existing literature in several ways. First, we take the multidimensionality of relationship quality into account. We argue that one should not only study the influence of relationship stability on fertility, but that other aspects of relationship quality may also be relevant in making fertility decisions. Second, unlike most studies that focus on the effect of marital stability – with the exception of a study by Myers (1997) – we use direct measures of separation proneness as well as of other aspects of relationship quality. Third, we examine whether relationship quality has the same influence on the timing of entry into parenthood as on the timing of second and third births. Finally, we study the effect of relationship quality on the likelihood of births both within marriage and within unmarried cohabitation. Attention to childbearing within non-marital unions is important because many children are born within such unions throughout the Western world. In addition, the choice to get married may not be independent of the choice to have children (Baizán, Aassve, & Billari, 2003, 2004). Rather, the desire to have

children might be an important reason to get married for cohabiting couples. In these circumstances, restricting the analysis to married couples could lead to biases in assessing the influence of relationship quality on fertility.

To answer our research question, we conduct event history analyses using panel data from the 1987, 1991 and 1995 waves of the Panel Study of Social Integration in the Netherlands (PSIN). Studying the relationship between fertility and relationship quality in the Netherlands is particularly interesting because it is a country with liberal family values (Inglehart & Baker, 2000). In such a context, neither the continuity of partner relationships nor the decision to have children can be taken for granted, but is thought to be negotiated upon by the partners involved (Giddens, 1991).

3.2 Theory and previous studies

Whereas an extensive literature exists on the expected consequences of having children for the quality of the relationship between partners (Bulatao, 1981; Callan, 1985, 1986; Fawcett, 1988; Miller & Pasta, 1994) and on its real consequences for relationship quality (Glenn, 1989; Kurdek, 1999; Helms-Erickson, 2001) and stability (Cherlin, 1977; Waite & Lillard, 1991; Lillard & Waite, 1993), theory and research on the opposite influence of relationship quality on fertility is relatively scarce. Moreover, most studies that address the issue focus almost exclusively on the influence of union stability. We start with reviewing this latter literature and subsequently discuss the reasons for broadening the scope to include a diversity of aspects of relationship quality.

In the literature on the influence of union stability on childbearing, two opposing hypotheses are proposed. The first hypothesis suggests that higher perceived union stability leads to earlier childbearing. This position is advocated by Lillard and Waite (1993), who emphasized that children represent the largest investment in marriage and that, therefore, the presence of children (especially young children) raises the costs of dissolution. A dissolution could imply either having to raise the children alone or to have reduced or no contact with the children. Lillard and Waite assumed that people take these costs into account in fertility decision-making. Therefore, they hypothesized that the higher the potential instability of the marriage, the lower the likelihood of a marital conception. It has to be noted that in earlier articles (e.g., Cohen & Sweet, 1974; Thornton, 1977, 1978) it was already suggested that marital discord would reduce fertility not only by reduced exposure in case of dissolution, but also prior to dissolution by reduced intercourse and by motivated prevention of conception.

The opposite hypothesis (union instability leads to earlier childbearing) was proposed by Friedman, Hechter, and Kanazawa (1994), who developed what they call an “alternative” rational choice theory of fertility: the uncertainty reduction theory of parenthood. This theory postulates that the value of having children in developed societies, where children’s net instrumental value is negative, lies in uncertainty reduction. This theory assumes that rational actors will always seek to reduce uncertainty, among others

by enhancing their marital solidarity. This latter aspect of their theory is relevant for our study. 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.

Relatively few empirical studies have tested these opposite hypotheses. 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. They found 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. Thornton's (1978) finding that married women had reduced fertility during the 2 years just before separation also suggests that the risk of a marital disruption decreases childbearing. 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 did not have a statistically significant effect on fertility until late in marriage. Conjugal discord only increased the likelihood that couples had a(nother) child if these marriages lasted more than 12 years. A drawback of all of these studies is that no direct measures of the perceived risk of marital disruption were used.

The theoretical article on the uncertainty reduction theory of parenthood by Friedman et al. (1994) has generated some empirical studies. One of these (Wu, 1996) focused on the role of general life uncertainty on childbearing within cohabitational relationships but did not include a direct measure of relationship uncertainty. To our knowledge, the study of Myers (1997) on marital uncertainty and childbearing is the only one that included direct measures of divorce proneness, marital happiness and marital interaction (how often partners engage jointly in five different activities). Myers found that divorce proneness negatively influences childbearing for all parities and that marital happiness positively influences childbearing at higher-order parities.

All of these studies focused on the influence of (perceived) union stability on the timing of childbearing. However, union stability can be considered as an aspect of the broader concept of relationship quality (Johnson et al., 1986), and it is questionable whether it is the only or even the most important aspect in deciding on having children. One could easily imagine that people, even if they are not considering leaving their partner or are not afraid of being left, still take aspects of the quality of the partner relationship into account in making childbearing decisions. People whose relationship quality is relatively low might consider their partner relationship not (yet) suitable for having

children, but still rather stay together with their partner than be alone. Or, conversely, such people might want to improve the bond with their partner by having a child. Hence, a logical extension of the hypotheses on union stability would be to juxtapose two general hypotheses on the effect of relationship quality on fertility behaviour. One hypothesis would assume that couples prefer to have children within a high-quality relationship, as this offers the most favourable environment to raise a child. Besides, partners in a high-quality relationship may be more likely to make the investment that having children implies. This hypothesis (Hypothesis 1) expects that higher relationship quality leads to higher rates of childbearing. We call this the “favourable environment hypothesis”, as a high-quality relationship offers a favourable environment to have and raise children. A competing hypothesis would assume that couples decide to have children in order to cement their low-quality relationship. This hypothesis (Hypothesis 2) expects that lower relationship quality leads to higher rates of childbearing. We call this the “revitalization hypothesis”, as having a child is viewed as a means to revitalizing one’s relationship.

Another issue is whether the influence of relationship quality on fertility timing is the same for first and for higher-order births. Lillard and Waite (1993) argued that childless people may be especially sensitive to the potential stability of their marriage in deciding to become parents. The costs of a disruption appear to rise dramatically with the birth of the first child. In addition, Bulatao (1981) observed that people expect that the birth of a first child will have stronger consequences for their partner relationship than the birth of subsequent children. Thus, relationship quality might have a stronger effect on the timing of first births than on the timing of subsequent births. Conversely, one could also argue that the effect of relationship quality may be stronger for subsequent births than for first births, because childless people may want to become parents anyway, regardless of the fate of their relationship (Lillard & Waite, 1993). In order to examine this issue, separate models for having a first birth and for having a higher-order birth will be estimated. Above, the concept of relationship quality has been used rather loosely. However, a review of marriage literature in the United States suggests a wide variability in the definition and operationalization of marital quality (Xu, 1998). According to the so-called “individual feelings school” (Glenn, 1990), marital quality should be treated as a global evaluation of the marriage, which makes it a subjective and unidimensional concept (Norton, 1983). Such a stand contrasts with the “multidimensional school”, according to which it is ambiguous to blend several dimensions, such as positive and negative dimensions, in one scale (Johnson et al., 1986). Besides, the adherents of this school argue that it is important to include objective evaluations, such as assessing the frequencies of marital disagreements (Xu, 1998).

Following this multidimensional approach, we consider relationship quality as a concept that includes both evaluative aspects (satisfaction or happiness, perceived stability) and behavioural aspects (what partners actually do together) (Amato, Johnson, Booth, & Rogers, 2003). An important issue is which aspects of relationship quality might be related to fertility timing. The literature on perceived union stability stresses

the importance of evaluative aspects. If people think that their union is at risk, or will be at some time in the future, they will adjust their fertility behaviour by either trying to have a baby soon (Friedman et al., 1994) or by postponing childbearing (Lillard & Waite, 1993). Alternatively, one could argue that couples make decisions about childbearing not so much on the basis of expectations about the (future) stability of their relationship, but rather on the basis of current experiences. In that case, it might be aspects like the kind of interaction patterns and the degree of value consensus that are important. To examine this issue, we include several relationship quality aspects in our study.

3.3 Method

3.3.1 Data

The data used in this study are from the PSIN (Liefbroer & Kalmijn, 1997). This survey consists of six waves of data collection (1987–2006) among a sample of Dutch young adults. In Waves 1 and 3, extensive information on relationship quality was collected. Therefore, this study uses data on relationship quality and other independent variables from Waves 1 and 3 and data on actual childbearing from Waves 1, 3 and 4. These waves took place in 1987, 1991 and 1995. Data were collected using a combination of face-to-face interviews and additional self-administered questionnaires. In 1987, a random sample of Dutch men and women born in 1961, 1965 and 1969 was drawn. The sample was stratified according to birth cohort and gender, using municipal population registers as the sampling frame. A total of 1,775 interviews were conducted in Wave 1. The response rate was 63.4%, which is a high for the Netherlands, where survey response rates tend to be lower than in other countries (De Leeuw & De Heer, 2001). In Wave 3, 70.9% of the original sample and in Wave 4, 54.2% of the original sample participated.

For this study, we selected respondents who were cohabiting (unmarried or married) at the time of Wave 1 and/or Wave 3. Separate analyses were conducted for first births and for second and third births. The sample for analyses of first births includes 451 respondents and the sample for analyses of additional births includes 218 respondents. The respondents were between 18 and 26 year old at the time of Wave 1, and between 26 and 34 at the time of Wave 4.

3.3.2 Variables

Information on the year and month of birth of all biological children was obtained in Wave 1 and updated in all subsequent waves. The time of conception leading to a birth, located at 9 months before the actual birth, was used as the indicator of the timing of fertility.

The concept of relationship quality was operationalized in a multidimensional way by distinguishing four dimensions: positive interaction, negative interaction, value consensus and separation proneness. The positive interaction scale contains four items: “Does your partner look at you when he or she talks to you?”, “Do you often talk about

common interests?”, “Does your partner show understanding?”, and “How often do you and your partner talk about nice things that happened during the day?” The negative interaction scale is also formed by four items: “How often does your partner sulk?”, “Does your partner sometimes talk to you with an unpleasant voice?”, “We quarrel”, and “How often does your partner find fault with you?”. The responses were scored on a five-point scale ranging from 1 (not at all) to 5 (very often) and were summed and recoded into a scale ranging from 0 to 10. These items were previously used by Buunk and Nijskens (1980), among others. Alpha coefficients of the positive interaction scale are .62 in Wave 1 and .68 in Wave 3. Alpha coefficients of the negative interaction scale are .60 in Wave 1 and .69 in Wave 3. Although the alpha coefficients are not high, they can still be considered sufficient, given that each scale consists of only four items. In order to examine whether positive and negative interaction should be considered as two different scales or whether one factor underlies the items, we conducted factor analyses with orthogonal and oblique rotation. They showed that a two-factor solution is highly preferable over a one-factor solution.

To examine whether it is reasonable to include positive and negative interaction, which both have highly skewed distributions, as continuous variables, we also categorized these variables. We first recoded each variable into a low, medium, and high category, each including about one third of the respondents. On the basis of preliminary analyses (results not shown), we decided to dichotomize the variables as follows: The scores of the low group on positive interaction (scores up to and including 7.5 on a 0–10 scale) were recoded into 1 and the medium and high scores were recoded into 0, resulting in the variable “low positive interaction”. For negative interaction the scores of the high group (scores 3.75 and above on a scale 0–10 scale) were recoded into 1 and the remaining scores were recoded into 0, resulting in the variable “high negative interaction”.

Value consensus was measured with two items: “How often do you agree or disagree with your partner on opinions on general norms and values?” and “How often do you agree or disagree with your partner on outlook on life?” Answers were scored on a seven-point scale ranging from 1 (always disagreeing) to 7 (always agreeing). They were summed and recoded into a scale ranging from 0 to 10. The correlation between these two items is .36 in Wave 1 and .40 in Wave 3. These items come from the dyadic consensus subscale of the Dyadic Adjustment Scale (Spanier, 1976). Although it would have been preferable to use multiple indicators for separation proneness, the data only provide one item, which is formulated as “I consider leaving my partner”. Answers were coded on a five-point scale ranging from 1 (not at all) to 5 (very often).

Literature on fertility shows that age, education and religiosity are important factors determining fertility behaviour (e.g., Blossfeld, 1995; Corijn et al., 1996). Therefore, we included these characteristics, from both partners if data permitted, as control variables. We included age at the start of cohabitation for the analyses of first childbirth and age at the time of previous childbirth for the analyses of higher-order childbirths. We used respondent’s and partner’s age in months and transformed these variables into men’s and

women's age. Educational level was measured for the respondents as well as their partners. We transformed this information into men's educational level and women's educational level. We used highest educational level attained or level of current education, if the respondent or partner was still enrolled in education at the moment of the interview and the level of current education was higher than the highest level previously attained. Level of education was coded as the number of years of schooling after primary school that are required to finish this level (range 0–11). Denominational attachment was measured on a six-point scale. The score 0 implies that the respondent is no church member, and if the respondent is a church member, the scores 1–5 represent the degree to which he feels attached to his church (1 = not at all, 5 = very strong). In Wave 1, no questions were asked with regard to the partner's religiosity, hence we only included the respondent's denominational attachment. The gender of the respondent is included as a control variable (0 = male, 1 = female), because the relationship quality measures are based on information reported by the respondent and because some of the background characteristics are only known for the respondent and not for the partner.

Parenthood intentions are also known to strongly influence fertility behaviour (Thomson, 1997; Schoen, Astone, Kim, Nathanson, & Fields, 1999). They were measured with the question: "Do you intend to have (more) children in the future?" In Wave 1 answers were scored on a five-point scale ranging from 1 (certainly not) to 5 (certainly yes); in Wave 3 the answers were scored on a seven-point scale, which was recoded to a five-point scale. We only included the respondent's parenthood intentions, because in Wave 1 no questions were asked about the partner's parenthood intentions. Furthermore, a marital status dummy was included, indicating whether the partners were married or not at the time of the interview (0 = not married, 1 = married), because we expect married couples to have children sooner than cohabiting couples. The duration of the relationship before the start of cohabitation in months was included as a control variable in the model of first birth, because couples who have been dating longer before they start living together have more information about the quality of their match, and thus might have a first child sooner than couples who start cohabiting early in their relationship. Finally, the number of children a respondent has (one or two) was included in the model of second and third birth.

3.3.3 Method of analysis

To examine the effect of relationship quality on the timing of childbirth, a series of Cox regression hazard rate models was estimated with the hazard of conception resulting in a live birth as the dependent variable. A hazard rate represents the risk that a person will experience an event, given that this person has not yet experienced the event. People were at risk from the time of the interview until the event (conception) occurred. If they separated or divorced before the event, they were censored at the time of separation or divorce. If they did not experience a birth nor a union dissolution before the next interview, they were censored at 9 months before the next interview, because it is not always known whether

the respondent or the partner of the respondent is pregnant at the next interview. In the analyses of first birth rates, time was measured in months since the start of cohabitation, and in the analyses of second and third birth rates, time was measured in months since the birth of the previous child. We created person records for the intervals between Wave 1 and Wave 3 and between Wave 3 and Wave 4. Respondents who participated in Waves 1, 3 and 4, and were cohabiting at the time of Waves 1 and 3, contribute two person-records, irrespective of whether they had the same partner or different partners at the time of Wave 1 and Wave 3. Hence, the observations are not all independent but nested in persons. Therefore, we estimated robust parameters, using the cluster option in Stata (StataCorp, 2005) to adjust the standard errors for intraperson correlation. Separate models were estimated for having a first birth and having a subsequent birth. If respondents had two or more births between two waves, the second and subsequent births are not included in the analyses, since the relationship quality might have changed after the first birth.

The characteristics of the samples for the analyses of first births and for the analyses of subsequent births are presented in Table 3.1. The total number of observations in the analyses of first births is 551, representing 451 respondents, and 258 first births occurred. The average duration of observation is 2.5 years. The number of observations for the analyses of second and third births is 268, representing 218 respondents. A total of 120 second and third births occurred and the average duration of observation is 2.7 years. Means and standard deviations of the control variables are also shown in Table 3.1. All analyses were performed using the *Stcox* procedure in Stata.

Table 3.1 Descriptive characteristics of the samples

	Sample for analyses of first childbirth		Sample for analyses of second and third childbirth	
	<i>M/ Proportion</i>	<i>SD</i>	<i>M/Proportion</i>	<i>SD</i>
Number of observations	551		268	
Number of respondents	451		218	
Number of births	258		120	
Average duration of observation ^a	2.50		2.67	
Control variables				
Age woman at start cohabitation ^a	22.33	2.75		
Age man at start cohabitation ^a	24.25	2.92		
Age woman at birth previous child ^a			25.75	2.75
Age man at birth previous child ^a			28.50	3.83
Gender respondent ^b	.46		.33	
Education woman ^c	5.9	2.3	4.8	2.3
Education man ^c	6.1	2.6	5.3	2.6
Denominational attachment respondent ^d	1.1	1.4	1.4	1.7
Parenthood intentions respondent ^e	4.2	1.1	3.2	1.5
Relationship duration before cohabitation ^a	2.97	1.95		
Marital status ^f	.19		.74	
Number of children			1.6	0.5

^aYears. ^b0 = male, 1 = female. ^cYears of schooling after primary school. ^dScale: 0–5. ^eScale: 1–5. ^f0 = not married, 1 = married.

Source: Panel Study on Social Integration in the Netherlands, Wave 1, 3 and 4 (1987, 1991, 1995).

3.4 Results

3.4.1 Main results

We start with a description of the relationship quality variables. The means and standard deviations of these variables are presented in Table 3.2. Not surprisingly, it appears that, overall, reports on the quality of the relationship are positive: average scores on positive interaction are high, scores on negative interaction and separation proneness are low. Average value consensus is lower than positive interaction, but still moderately high. There are hardly any differences on relationship quality variables between the sample of childless couples and the sample of couples that already have at least one child, yet less positive interaction with the partner is reported by respondents who already have a child. This is in line with results of studies on the effect of having children on marital quality (e.g., Glenn & McLanahan, 1982), suggesting that the presence of children reduces marital quality.

Table 3.2 Description of relationship quality variables

	Sample for analyses of first childbirth (<i>N</i> = 551)		Sample for analyses of second and third childbirth (<i>N</i> = 268)	
	<i>M</i>	<i>SD</i>	<i>M</i> /Proportion	<i>SD</i>
Positive interaction ^a	8.6	1.2	8.3	1.3
Low positive interaction ^b			.36	
Negative interaction ^a	2.9	1.4	2.9	1.3
High negative interaction ^c			.30	
Value consensus ^a	7.2	1.2	7.3	1.0
Separation proneness ^d	1.1	0.4	1.1	0.3

^aScale: 0–10. ^b0 = medium or high positive interaction, 1 = low positive interaction. ^c0 = medium or low negative interaction, 1 = high negative interaction. ^dScale: 1–5.

Source: Panel Study on Social Integration in the Netherlands, Wave 1, 3 and 4 (1987, 1991, 1995).

Table 3.3 shows the models for the hazard of having a first birth and the hazard of having a second or third birth. Before we discuss the influence of the relationship quality variables on birth rates, we will pay attention to the effects of the control variables. The age of the woman at the start of the cohabitation has a positive influence on the first birth rate, implying that the older the woman is at the start of cohabitation, the sooner the couple has their first child. The age of the woman at the birth of the previous child has a negative influence on the rate of second and third births; the younger the woman is at the birth of the previous child, the sooner she has her next child. A woman's educational attainment has a negative influence on the first birth rate, but when a couple already has children, her educational attainment does not have a statistically significant effect on the rate of subsequent births. The age of the male partner at the start of the union or at the time of the previous birth and his educational attainment do not have an effect on the rate of first nor of subsequent births. The same is true for the respondent's gender and the

respondent's denominational attachment. The duration of the relationship before the start of cohabitation has a positive effect on the first birth rate. The longer a couple has been dating before they start living together, the sooner they have a first child.

Not surprisingly, the respondent's parenthood intentions have a large effect on the rates of first and subsequent childbearing. The stronger the parenthood intentions, the higher the rate of having a first as well as of having a subsequent birth. Whether the couple is married or cohabiting unmarried at the time of the interview does not influence the first birth rate, nor the rate of subsequent births. Parity has a statistically significant negative influence on the rate of subsequent births, indicating that the likelihood of having a second child is higher than the likelihood of having a third child.

Next, we turn to the effects of relationship quality indicators, to answer our questions whether relationship quality influences the timing of childbearing, and if so, which aspects of relationship quality have an effect and in what direction. Table 3.3 shows that negative interaction negatively influences the rates of first as well as subsequent childbearing. This implies that the more negative interaction occurs within a partner relationship, the more childbearing is postponed. This finding supports the favourable environment hypothesis that relationship quality positively influences childbearing. However, positive interaction also has a statistically significant negative influence on the rates of first and subsequent childbearing, implying that the more positive interaction occurs within the relationship, the more parenthood is postponed. This finding lends support to the revitalization hypothesis that relationship quality negatively influences childbearing. It is surprising to find negative influences of positive and negative partner interaction at the same time, given that positive and negative interaction correlate moderately negatively with each other ($r(551) = -.24$ in Wave 1 and $r(268) = -.30$ in Wave 3). Our results do not provide evidence that value consensus or separation proneness influences the rate of first childbirth nor the rate of second and third childbirth.

Finally, we examined whether relationship quality has the same influence on entry into parenthood as on the occurrence of second and third births. The results in Table 3.3 do not indicate a significant difference, given the magnitudes of the standard errors.

3.4.2 Additional analyses

A number of additional analyses was conducted to examine the robustness of our findings. First, we examined whether the results changed if parenthood intentions and marital status were removed from our models. These factors were included as control variables in order to reduce the amount of unobserved heterogeneity. However, parenthood intentions and marital status could be considered as rather endogenous to fertility. Therefore, we reran our models without parenthood intentions and marital status as explanatory variables. In the resulting models (not presented), the negative effect of positive interaction on first and on higher-order birth rates remains statistically significant and about equal in size, while the negative effect of negative interaction decreases slightly and only maintains significance at the .10 level.

Table 3.3 Risk estimates for hazard model of first childbirth ($N = 551$) and hazard model of second and third childbirth ($N = 268$)

	First childbirth		Second and third childbirth	
	<i>B</i>	Robust <i>SE</i>	<i>B</i>	Robust <i>SE</i>
Age woman at start cohabitation ^a	0.008***	0.002		
Age man at start cohabitation ^a	0.001	0.002		
Age woman at birth previous child ^a			-0.009*	0.004
Age man at birth previous child ^a			0.002	0.003
Gender respondent ^b	0.123	0.125	0.175	0.232
Educational attainment woman ^c	-0.103***	0.029	0.040	0.048
Educational attainment man ^c	0.042	0.027	0.008	0.042
Denominational attachment respondent ^d	0.059	0.047	0.102	0.063
Parenthood intentions respondent ^e	0.700***	0.086	0.787***	0.110
Relationship duration before cohabitation ^a	0.005*	0.086		
Marital status ^f	-0.170	0.186	0.155	0.225
Number of children			-0.666*	0.262
Positive interaction ^g	-0.173**	0.057	-0.204*	0.089
Negative interaction ^g	-0.146**	0.054	-0.214**	0.074
Value consensus ^g	-0.038	0.063	-0.160	0.116
Separation proneness ^h	0.131	0.241	0.163	0.141
Log pseudo likelihood		-1,207.2		-490.5

^aMonths. ^b0 = male, 1 = female. ^cYears of schooling after primary school. ^dScale: 0–5. ^eScale: 1–5. ^f0 = not married, 1 = married. ^gScale: 0–10. ^hScale: 1–5.

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

Source: Panel Study on Social Integration in the Netherlands, Wave 1, 3 and 4 (1987, 1991, 1995).

Second, we examined whether the negative effect of positive interaction on the rates of first and subsequent births might be spurious. It could be argued that it is not so much a lack of positive communication between partners that leads to higher rates of childbirth, but that traditional gender attitudes lead to a low level of positive communication between partners, and at the same time stimulate childbearing. Couples in which the man is oriented towards work and career, while the woman has a strong homemaker orientation, might not have much common interests to talk about, but are likely to have a higher rate of childbearing. Therefore we included in our models a variable on gender role attitudes of the respondent, measured by the level of agreement with the item: “It is most natural that the man is breadwinner and the woman takes care of the household and the children”. Adding this variable to the models does not alter the results (not presented). The effects of positive and negative interaction on the rates of first and higher-order births remain the same. In addition, to examine whether the nature of partner interaction matters less for the fertility of traditional couples, we tested whether there are interaction effects of positive interaction and gender role attitudes, respectively negative interaction and gender role attitudes. We did not find any evidence for these interaction effects.

Third, we examined whether our models could be improved by categorizing positive interaction and negative interaction, given the skewed distributions of these variables. We recoded both variables into three ordinal categories, each category containing about one third of the observations, and reran our models (results not presented). The model of first birth did not improve and the results indicated that the assumption of linearity is plausible. Conversely, the model of higher-order childbirth showed that the relationship between positive respectively negative interaction and the hazard of higher-order births is not linear; low positive interaction and high negative interaction are the categories that matter. Medium and high positive interaction did not have statistically significantly different effects, neither did medium and low negative interaction. Consequently, we dichotomized positive and negative interaction and included the dummies for low positive interaction and high negative interaction in the model of second and third childbirth (Table 3.4). The results indicate that, among couples with at least one child, those with low levels of positive interaction are more likely to have an additional child (soon). Furthermore, the negative influence of high negative interaction on higher-order childbirths indicates that couples are less likely to have an additional child when they have high levels of negative interaction. In addition, while value consensus did not have an effect in our previous models, in this second model of higher-order birth, it has a statistically significant negative effect. This implies that the more value consensus there is among partners who have at least one child, the less likely they are to have an additional child soon. This seems to provide support for the revitalization hypothesis that relationship quality negatively influences childbirth and might be considered in line with the negative effect of positive interaction on higher-order birth rates.

As the responses on the separation proneness variables are skewed as well, we also conducted additional analyses with a dichotomized variable for separation proneness. The original five-point scale ranging from not at all to very often was recoded into two categories: one category only containing the answer not at all and the other category containing the four other original answer categories. This did not bring about a statistically significant effect of separation proneness in any of the models nor did it improve any of the models (results not shown).

Finally, we checked whether there are interaction effects between gender of the respondent and positive interaction respectively negative interaction, as the relationship quality indicators are only based on information from the respondent. No interaction effects were found.

Table 3.4 Risk estimates for additional hazard model of second and third childbirth ($N = 268$)

	<i>B</i>	Robust <i>SE</i>
Age woman at birth previous child ^a	-0.009**	0.004
Age man at birth previous child ^a	0.003	0.003
Gender respondent ^b	0.102	0.238
Educational attainment woman ^c	0.046	0.049
Educational attainment man ^c	-0.004	0.041
Denominational attachment respondent ^d	0.117	0.067
Parenthood intentions respondent ^e	0.824**	0.115
Marital status ^f	0.104	0.231
Number of children	-0.666*	0.267
Low positive interaction ^g	0.582*	0.235
High negative interaction ^h	-0.695**	0.245
Value consensus ⁱ	-0.223*	0.112
Separation proneness ^j	0.186	0.144
Log pseudo likelihood		-488.9

^aMonths. ^b0 = male, 1 = female. ^cYears of schooling after primary school. ^dScale: 0–5. ^eScale: 1–5. ^f0 = not married, 1 = married. ^g0 = medium or high positive interaction, 1 = low positive interaction. ^h0 = medium or low negative interaction, 1 = high negative interaction. ⁱScale: 1–10. ^jScale: 1–5.

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

Source: Panel Study on Social Integration in the Netherlands, Wave 1, 3 and 4 (1987, 1991, 1995).

3.5 Conclusion and discussion

The aim of this study was to examine whether the quality of the partner relationship influences the timing of fertility, and if so, which aspects have an effect and in which direction. We formulated two contradicting hypotheses. Do couples with a high-quality relationship have higher birth rates because a good relationship offers a favourable environment to raise children or do couples with a low-quality relationship have higher birth rates because they see having children as a way to revitalize their relationship? The existing literature on this topic has a narrow focus on the effect of relationship stability. We tried to generate new insights by taking into account the multidimensionality of the concept of relationship quality. Specifically, we examined the effects of the following indicators of relationship quality: separation proneness, positive interaction, negative interaction and value consensus. Our results showed that positive and negative interaction influence the first birth rate as well as the rate of second and third childbirths, but in unexpected ways. The effect of value consensus is less clear-cut. We did not find evidence for influence of separation proneness.

We found that positive as well as negative partner interaction has a negative effect on the timing of first as well as second and third births. These findings, and especially the postponing effect of positive communication, turned out to be robust in a number of additional sensitivity analyses. They lend support to both of our competing hypotheses.

How can we reconcile these results? We would suggest that they indicate that reality is more complicated than either one of our contradicting hypotheses suggests. On the one hand, the more negative interaction is going on in a couple relationship, the more likely it is that this couple will postpone childbearing, suggesting that not having a bad relationship constitutes a pre-condition for having children. On the other hand, experiencing a lot of positive partner interaction seems to lead to the postponement of childbearing as well. This suggests that couples with low levels of positive interaction might opt for a(n)other child to revitalize their relationship. At the same time, it might imply that if a great deal of positive interaction is going on, partners are happy with their current family situation and view a(n) (additional) child as a potential threat to this happiness. Taken together, these results seem to suggest that couples are particularly likely to have children if their relationship is basically sound but has become a little dull. If so, partners do not see having a child as a way to enhance their solidarity, but rather as providing a new challenge to their relationship. The negative effect of value consensus on the likelihood of higher-order births seems to fit this same interpretation. Parents who experience relatively little value consensus may see having additional children as a way to infuse their life with a new challenge.

This interpretation of having children as a way to infuse a relationship with a new challenge seems to hold for both first and higher-order births. Apparently, the quality of their relationship is taken into account by couples both in deciding on entry into parenthood and in deciding on family expansion. In fact, the results for higher-order births are even more clear-cut. Having higher-order births is being postponed if a lot of negative interaction is going on in a relationship and if a relationship is characterized by a medium to high level of positive interaction. Combined with the negative effect of value consensus, this suggests that higher-order births are particularly likely among couples with a basically sound relationship, in which relatively little is going on among the partners, neither in the sense of communication nor in the sense of joint things in life to strive for.

A final surprising finding is our lack of evidence for an effect of separation proneness on childbearing rates, as this conflicts with the results of the study done by Myers (1997). One explanation could be that Myers used multiple indicators for separation proneness, including cognitive aspects and actions, whereas we used a one-item measure. Hence, we are cautious to conclude that there is no effect of separation proneness on fertility. Another explanation could be that the cultural setting in the Netherlands is different from that in the United States. Union dissolution rates are lower in the Netherlands than in the United States (United Nations Economic Commission for Europe, 2005). As a result, couples in the Netherlands may be less occupied with the possibility of a future separation or divorce than couples in the United States and focus on the interaction processes within the relationship rather than on perceived union dissolution when deciding on childbearing.

Taken together, our results showed that relationship quality influences the timing of childbearing within couple relationships. The issue of which dimensions of relationship quality have an effect was treated as exploratory. In addition, not all aspects of relationship quality were measured equally reliable. This makes it hard to find statistically significant effects. Therefore, the effects that we did find are probably quite robust. Nonetheless, replication of our results in other studies is desirable. What is also needed is the development and testing of more rigorous hypotheses about which aspects of relationship quality influence childbearing in which ways. Future research is also needed to redress other shortcomings of this study. For instance, our measure of the quality of the relationship was based on the report of one of the partners only. It might be that partners differ in their views on the quality of their relationship. In these circumstances, it would be interesting to have both partners' evaluations of the relationship, and to see whether the views of one of the partners are more important than those of the other. In addition, this study used a relatively short time-frame, making it hard to say whether relationship quality only effects the timing of childbearing, or whether it also influences total fertility. Finally, this study focused on relatively young couples and it might be that the influence of the quality of the relationship is partly dependent on the age of the couples involved. To answer these latter two questions, studies should follow couples during the whole of their reproductive life span.

Chapter 4

His and her relationship quality: Effects on childbearing

This chapter is co-authored by Elizabeth Thomson (Stockholm University and University of Wisconsin at Madison). It is currently under review at an international journal. Earlier versions of this chapter were presented at the European Population Conference, July 2008, Barcelona (Spain) and at the annual meeting of the Population Association of America, April–May 2009, Detroit, MI (USA).

4.1 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; Morgan, 1985; Thomson et al., 1990; Corijn et al., 1996; Thomson, 1997, 2002; Thomson & Hoem, 1998; Jansen & Liefbroer, 2006). Much less attention has been paid to the influence on fertility of the quality of the partner relationship itself.

Research on the relationship between partner relationship quality and childbearing usually focused 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 (Thornton, 1978; Koo & Janowitz, 1983; Lillard & Waite, 1993; Thomson & Henz, 2005). Because it is the couple's separation that is observed, these studies implicitly take a couple point of view. Two studies measured relationship quality directly, but only from one partner's point of view (Myers, 1997; Rijken & Liefbroer, 2009¹). However, men's and women's relationship satisfaction might have different determinants (Doorten, 2008) 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. Second, we test the hypothesis developed by Rijken and Liefbroer (2009) 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 effect², suggesting that the highest-quality relationships – those with low

¹ See chapter 3 for Rijken & Liefbroer (2009).

² Partner interaction was measured with items on the nature of the communication between the partners, e. g. items on showing understanding or the frequency of quarrels. These items formed two separate scales: positive and negative partner interaction (see chapter 3).

negative interaction and high positive interaction – would be *less* likely to produce births than those with low negative interaction and low positive interaction. 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.

4.2 Theory and previous research

4.2.1 Relationship quality and fertility

The decision to have a child is one of the most influential 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 show 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 (Malpas & Lambert, 1993; European Commission, 1997; 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 support 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 did not have a statistically significant effect on fertility until later in marriage. Conjugal discord only increased the likelihood that couples had a(nother) child if these marriages lasted 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 had

a negative effect on her likelihood of marital childbearing: it lengthened 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 influenced childbearing.

While 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 (Grych & Fincham, 1990; Amato et al., 1995; 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 (Houseknecht, 1979; Glenn & McLanahan, 1982). Studies of reasons for and against having (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 (Bulatao, 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 shows that people consider emotional satisfaction and fulfillment, and giving and receiving love and affection as important benefits of having children (Hoffman & Manis, 1979; Bulatao, 1981; Callan, 1986; Seccombe, 1991), but also that people expect that having a first or another child will benefit the partner relationship (Hoffman & Manis 1979; Bulatao 1981; Callan 1986; Liefbroer, 2005).

Friedman et al. (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 et al., 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 low positive interaction were more likely to have (additional) children than those with high negative and those with high 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.

4.2.2 His and her relationship quality

As noted earlier, most studies on relationship stability and childbearing did not directly measure relationship quality (Thornton, 1978; Koo & Janowitz, 1983; Lillard & Waite, 1993), 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 deciding whether or not they want a child because women 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 when there are (more) 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. However, Seccombe (1991) 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 relationship 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" (Thomson, 1997; Thomson & Hoem, 1998; Jansen & Liefbroer, 2006). 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 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 the quality of their partner relationship have stronger effects on childbearing than men's perceptions.

H2b) Men's perceptions of the quality of their partner relationship 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 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 principle of inertia (Davidson & Beach, 1981). Inertia inhibits change of behaviour (concerted action) when couples disagree. When the ongoing behaviour is using contraception to prevent or delay births, agreement about having a child is required to change the behaviour 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 favourable for having a child has a dominant influence on childbearing.

4.3 Method

4.3.1 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., Vikat, Thomson, & Hoem, 1999; Thomson et al., 2002). We focus on first and second births because third and higher-order births are relatively uncommon.³ Our restrictions resulted in a sample of 683 couples, of which 418 were childless and 256 had one child at Wave 1.

4.3.2 Variables

Childbirth. The dependent variables in this study are the likelihood of having a first and the likelihood of having a second child between Waves 1 and 2 (or of the woman being pregnant with a first or a second child at Wave 2). Birth and partner histories since Wave 1 were 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 four-point scale from no support to a lot of support. The degree of partner conflict was 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: not at all, occasionally, and 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 five-point scale ranging from strongly agree to strongly disagree.

³ Only 64 out of the 488 couples with two children at Wave 1 had a third child before Wave 2. Numbers of fourth or higher-order births are even much lower. Since analyses based on such a low number of births might not be very reliable, we did not study the effects of partner relationship quality on third or higher-order births.

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. Cronbach’s alpha for 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 (Hypothesis 1c) between relationship quality and childbearing, as well as the 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 sexes 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 5.⁴ 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.

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 were 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 was 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 was 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 his

⁴ 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.

or her partner. We distinguished the four most prevalent combinations and a residual category: (1) man full-time employed (36 hours or more per week), woman not employed; (2) man full-time employed, woman employed short part-time (1–23 hours per week); (3) man working full-time, woman employed long part-time (24–35 hours per week); (4) both full-time employed; and (5) 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, since 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.

4.3.3 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 2.⁵ We conducted logistic regression analyses rather than hazard regression analyses since 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.

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, due to birth spacing. If a couple is going to have a second

⁵ 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.

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 to be of high quality and/or see their relationship as very suitable for having children, but still postpone their first child beyond Wave 2 for other reasons.

We specified 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 the 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 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.

4.4 Results

4.4.1 Descriptives

Table 4.1 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 (Houseknecht, 1979; Glenn & McLanahan, 1982). Furthermore we see that extremely divergent perceptions among partner (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.

In Table 4.2 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 54% of the couples with a child had a second child or pregnancy. The distributions of man's and woman's relationship quality indicate that the non-response 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 couples with a child 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 4.1 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).

4.4.2 First births

Table 4.3 shows the odds ratios of first childbirth 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.

Table 4.2 Descriptive characteristics of the samples

	Childless couples (<i>N</i> = 418)		Couples with one child (<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 \leq 2 years younger or \leq 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 4.3 Odds ratio estimates of first birth ($N = 418$)

	Model 1		Model 2		Model 3	
	Odds ratio	z^e	Odds ratio	z^e	Odds ratio	z^e
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	

^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).

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 non-monotonic. 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 man's relationship quality and the couple's likelihood of having a first child between interviews.⁶ 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. However, 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 versus Model 1) does not result in an improvement of the model's fit ($\Delta\chi^2 = 2.74$, $\Delta df = 2$, $p = .254$), while adding woman's relationship quality to man's relationship quality (Model 3 versus Model 2) does so at the .10 α -level ($\Delta\chi^2 = 5.44$, $\Delta df = 2$, $p = .066$). Considering the small N we tentatively conclude that the woman's relationship quality affects the likelihood of first birth, while 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 ($\Delta\chi^2 = 5.26$, $\Delta df = 4$, $p = .262$). (Details of the analysis are available on request.) Therefore we reject Hypothesis 3, that one partner's assessment of relationship quality as unfavourable for childbearing is sufficient to inhibit first birth.

4.4.3 Second births

In Table 4.4 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

⁶ 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.

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 childbirth, 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). However, if the woman is higher educated than her partner, 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 childbirth, it does not affect the odds of having a second child. The duration of the relationship and the duration of the observation do not have an effect. Finally, whether the partner'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 non-monotonic 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 non-monotonic effect, supporting Hypothesis 1c. In addition we conclude that the effect of man's relationship quality on second birth is positive, though non-linear, 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 versus Model 1) results in an increase in the model's fit ($\Delta\chi^2 = 7.18$, $\Delta df = 2$, $p = .028$), and that adding woman's relationship quality to man's relationship quality (Model 3 versus Model 2) also leads to an increase in the model's fit at the .10 α -level ($\Delta\chi^2 = 5.58$, $\Delta df = 2$, $p = .062$). 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

Table 4.4 Odds ratio estimates of second birth ($N = 265$)

	Model 1		Model 2		Model 3	
	Odds ratio	z^e	Odds ratio	z^e	Odds ratio	z^e
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	0.98**	-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	0.30**	-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		1.00		1.00	
Married	1.19	0.93	1.24	1.17	1.21	1.01
Relationship duration ^a	1.03	0.80	1.02	0.49	1.03	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	3.06**	2.77			2.53*	2.23
High	1.75	1.33			1.32	0.63
No response	1.15	0.23			1.04	0.07
Relationship quality man						
Low			1.00		1.00	
Medium			3.29**	2.76	2.97*	2.46
High			2.73*	2.31	2.44 [†]	1.94
No response			1.26	0.55	1.24	0.50
χ^2	100.03		101.62		107.20	
df	19		19		21	

^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).

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 ($\Delta\chi^2 = 4.86$, $\Delta df = 4$, $p = .302$). (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.

4.5 Conclusion and 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 while men's perceptions are positively but non-linearly 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 have 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 non-monotonic for women but only non-linear for men. Women are most likely to have first and second children when they perceive their relationship quality as medium. Those who find their relationship of high quality are in between women with low or medium-quality relationships, regarding the likelihood of having a child. Men who already have a child and who perceive their relationship as 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 happy with their relationship are less likely to have children than women who rate their relationship as medium while 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. However, this argument 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. Yet the positive effect was found for men who already have 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 influences 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 higher parity 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. However, maybe it is 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 that we suggested for 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. However, since 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 unfavourable 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 the 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 4.3.3). 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 measures 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 perceptions 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. However, previous research from the United States (Thomson et al., 1990; Thomson, 1997; Sobel & Arminger, 1992) 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; and 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.

Chapter 5

Couples' decisions on having a first child: Comparing pathways to early and late parenthood

“Couples – and individuals – no longer plan life in terms of the child and his personal future, as was the case during the nineteenth and early twentieth centuries. This does not mean that the child has disappeared from such plans but that he fits into them as one of the various components that make it possible for the adults to blossom as individuals.”

Philippe Ariès, 1980

This chapter is co-authored by Trudie C. M. Knijn (Utrecht University). It is currently under revision for an international journal and was presented at the annual meeting of the Population Association of America, April–May 2009, Detroit, MI (USA).

5.1 Introduction

In Western societies, having children is nowadays a matter of *if* and *when* for most people. The disconnection between having a sexual relationship and having children has resulted in lifestyle choices (Giddens, 1991) that never have existed before in human history. Like Giddens, Beck and Beck-Gernsheim also emphasize the importance of making choices in modern society: “The choosing, deciding, shaping human being who aspires to be the author of his or her own life, the creator of an individual identity, is the central character of our time” (Beck & Beck-Gernsheim, 2002, p. 22–23). These lifestyle choices complicate partner relationships and many authors assume that communication and negotiation between partners have increased (De Swaan, 1981; Van der Avort, 1987; Giddens, 1991, 1992; Beck & Beck-Gernsheim, 1995; Lewis, 2001). According to Beck (1992), modern marriages and families are made by the joining of individuals, and as a consequence are more contingent upon decision-making and planning. Giddens describes how social relationships have democratized and he refers to democratized romantic relationships as pure relationships. According to him, “the imperative of free and open communication is the sine qua non of the pure relationship” (Giddens, 1992, p. 192).

Not only is it a common sense idea that having children usually is a choice, about which partners preferably reach agreement, but authors also assume that the duration of the decision-making process is increasing. For instance, Beck and Beck-Gernsheim write about the decision of whether to have children: “So what is thought of as a situation requiring a decision often turns into a long-drawn-out process” (Beck & Beck-Gernsheim, 1995, p. 110–111). An important reason for this is that the demands on parenthood have increased, since parallel to the freedom to choose, children have become a precious possession. Having children might be preceded by a long process of thought, reflection, and communication or discussion between partners. This decision process does not get much attention in empirical studies on fertility yet, since most fertility research is quantitative and focuses on (determinants of) fertility outcomes such as number of children and timing of birth. Yet, part of the demographic research that aims at explaining fertility outcomes (implicitly) assumes conscious decision-making, whether extensive or not, for instance by linking childbearing intentions to behaviour or by assuming that people weigh costs and rewards of having children. To study *how* people decide on having children – how much thought they gave it, if they consciously weighed costs and rewards, what dilemmas they have faced and how they deliberate to reach a decision – qualitative research is more appropriate.

Studies on the decision to have children usually only included either women (Den Bandt, 1982; Gerson, 1985; Van Luijn, 1994; Bernardi, 2005; Sevón, 2005) or, to a much lesser extent, men (Jacobs, 1995; Von der Lippe & Fuhrer, 2004; Knijn, et al., 2006). We included both parents in this study by having in-depth interviews with couples. We restrict ourselves to the decision-making on having a first child. For theoretical reasons, in particular the perspective that emphasizes increased duration of decision-related

deliberations, we compare Dutch couples who had their first child at a relatively old age with couples who had their first child at a relatively young age.¹ We assume that having a child is always preceded by decision-making, whether couples have given it much thought and discussion or not, and whether they reached consensus or not. The leading question of this article therefore is:

What is the nature of the decision-making process on having a first child among couples who had their first child at a relatively young age and couples who had their first child at a relatively old age? And to what extent and in which way does this process differ between the two groups?

In particular we will examine (a) to what extent the decisions have been taken implicitly or explicitly (Sillars & Kalbflesch, 1989) – therefore we will focus on deliberations on the decision by each partner and the communication between them – and (b) which motives and arguments play a role in the decisions on having a first child and the timing of the transition towards parenthood.

This study is conducted in the Netherlands, a country that belongs to the world top with regard to postponing parenthood. The average age of mothers at the birth of their first child is 29. But not all young adults delay parenthood. For instance, 18% of first children born since 2000 in the Netherlands were born to a mother under 25 (Statistics Netherlands, 2008, own calculations). Do such parents differ from older parents in their decision-making on the first child? Do different arguments play a role? Do younger couples communicate less? Or does their decision-making process just start earlier? Whereas Giddens as well as Beck and Beck-Gernsheim suggest that deliberate decision-making is currently a central characteristic of individuals and couples, it is likely that people do not have equal abilities to engage in a reflexive biography (Mills, 2007) and we expect that postponed entry into parenthood is preceded by more extensive decision-making, more long-term planning and more discussion than young entry into parenthood.

Pathways into parenthood evidently encompass many facets, from background characteristics, partnership histories and early child wishes to the joined decision-making process within the partnership. This article will touch upon all these aspects, but focuses on the latter. Our study draws on 33 semi-structured interviews with couples that are selected from the respondents of the Netherlands Kinship Panel Study, a large-scale nationally representative survey (Dykstra et al., 2005). Of these couples, 17 had their first child at a young age and 16 couples at a relatively old age (see subsection 5.3.1 for age definitions). The interviews were held in 2006 and 2007.

¹ We restrict ourselves to first births in this study, because it is likely that the nature of the decision-making on first, second and higher-order children is different. Although decisions of young and old parents on higher-order births might also diverge in interesting ways, we expect the differences on the decision on the first child to be most prominent.

5.2 Theoretical framework

Since the contraceptive revolution, sexuality and reproduction are no longer evidentially connected. The other side of the coin is that people have to decide on their reproduction, which might not always be experienced as an easy thing to do. Even if a pregnancy is unplanned, one has to decide whether or not to keep the baby.

Giddens (1991, 1992), Beck, and Beck-Gernsheim (Beck, 1992; Beck & Beck-Gernsheim, 1995, 2002) reflect on decision-making by way of “grand concepts” that structure modern people’s lives including the transition towards parenthood, such as “choice biography”, “reflexive modernity”, “democratic partnerships”. However, their theoretical ideas are not aimed directly at conducting empirical research, so for the purpose of our study these ideas have to be translated into more concrete concepts, specifically related to childbearing decisions. In our interpretation, their ideas suggest that men and women individually think about the decision to have children, reflect extensively on their (future) circumstances in this process, and plan ahead. They also have “linked lives” (Elder, 1994, 1998); they are mutually dependent and therefore have to balance their own deliberations with their partners. Hence the decision-making process happens in a dialogue between partners.

With regard to thoughts, deliberations and dialogue during the decision-making process, Spiegel (1960) already assumed that traditional couples make decisions more automatically than modern couples. By definition, traditionalism implies self-evidence of crucial life events, such as family formation. Traditional life relieves people from decision-making: strict norms and values regulate people’s lives. Similarly, Sillars and Kalbflesch (1989) speak of implicit decision-making and contrast this with explicit decision-making. Implicit decision-making is an indirect, non-reflective style of decision-making. Explicit decisions are made by partners who plan proactively and are aware that they are in a process of decision-making. They are supposed to deliberate explicitly on the issue, and if needed they negotiate. Partners might already agree on the wish to become parents, but even then they might have discussions or negotiate, for instance on the timing of the birth or how to live their lives as parents. To summarize, the theoretical view of Giddens, Beck, and Beck-Gernsheim on choices and partner interaction suggests that births are nowadays preceded by explicit decision-making which is characterized by thought, planning and communication between partners.

Previous empirical (qualitative) research on another couple issue, namely the division of household tasks and paid labour, shows that decision-making on this topic is quite implicit (Evertsson & Nyman, 2008; Wiesmann, Boeije, Van Doorne Huiskes, & Den Dulk, 2008). Such a division of tasks may come into existence in daily routines, by taking gender assumptions for granted. The decision on whether or not to have a child however is of a different nature. Having a child is irreversible and presumes sustained commitment to supporting the child for a long time. Moreover, entering parenthood arguably involves the most profound change in an individual’s life course (Hobcraft &

Kiernan, 1995), therefore more explicit deliberations might be expected here. Yet, a reason for non-communication on having children could be that partners think they agree without making sure that that is the case. They might believe that once they're married, having children will be self-evident. If partners indeed agree without deliberations, they have reached spontaneous consensus (Scanzoni & Szinovacz, 1980). However, there might also be silent arrangements when partners have different wishes (Scanzoni & Szinovacz, 1980). People might not raise the issue of having children because they think their partner does not want children (yet). Studies on partner interactions (Hochschild, 1989; Komter, 1989) show that men and women implicitly influence each other, for instance through latent power mechanisms. The partner who wants to maintain the status quo benefits from not talking about a contested issue. Other studies (Nederlandse Gezinsraad, 2001) show that women tend to wait with raising the issue until they feel that their partner is willing to discuss it. They observe their partner's reaction to child-related issues, such as births among relatives and friends, and conclude how eager he is to have children himself.

The fact that partners have linked lives might have several implications. Interdependency means that partners have to balance their own interests and those of their partners. On the one hand, people may only want children if it fits into their own lives or postpone the first birth until they are ready to adjust their lives. Common explanations for the postponement of first births are that women's increased education and labour market participation confronts them with a lack of possibilities to combine work and care. Likewise, increased individualism and consumerism among young generations make people want to develop themselves and enjoy their freedom (preferably with dual-earner purchasing power) before they have children (Knijn et al., 2006). On the other hand, one partner cannot continue to follow his or her own interests if these contradict the other partner's interests in such a crucial life event as having children. What does this mean when one partner wants a child and the other one does not (yet)? One option is that a couple only tries to have a child if both partners want it. This means that each partner has veto power (Thomson & Hoem, 1998), or stated differently, people might be very sensitive to their partner's wishes: "I would like to have a child with you, but only if you also want it". Another option is that one partner is most influential in the decision, regardless of whether this partner wants a child (yet). This influence could have a basis in socio-economic resources, meaning that the partner with the most resources has a decisive say (Blood & Wolfe, 1960). Influence also can be based on spheres of interest; because of gender patterns, children still are women's sphere (Thomson, 1997). Studies on fertility behaviour, however, show an equal influence of men's and women's childbearing preferences or intentions (Thomson et al., 1990; Thomson, 1997; Thomson & Hoem, 1998), and support the veto power process to some extent; the fertility behaviour of couples with disagreeing childbearing desires is more similar to that of couples in which both partners want no (more) children than to couples with a shared desire for (more) children (Beach, Hope, Townes, & Campbell, 1982; Miller & Pasta, 1996; Thomson,

1997; Thomson & Hoem, 1998). Here we are interested in the underlying processes of these outcomes.

Besides examining the extent to which couples' decision-making is explicit, we focus on the motives and arguments that are important in the choice for and timing of the first child. There is an enormous body of theoretical and empirical literature on factors that affect childbearing outcomes, such as education, career (prospect), social norms, composition of the family of origin, and partner relationship quality. Socio-cultural theories assume that fertility is affected by value orientations such as religion, gender roles, hedonism and self-fulfilment (Lesthaeghe & Van de Kaa, 1986; Van de Kaa, 1987; Lesthaeghe, 1995), or by more specific norms such as family norms on ideal family sizes (Axinn et al., 1994) and ideal ages to have children (Steenhof & Liefbroer, 2008). Socio-economic theories such as the New Home Economics (Becker, 1991) envision fertility from the view of direct costs and opportunity costs, and assume that individuals or couples make rational choices based on socio-economic resources, such as their education, income and career prospects. Partner relationship quality could also be the subject of considerations on having children (Lillard & Waite, 1993; Myers 1997; Rijken and Liefbroer, 2009), since children represent a large investment in the relationship and having children might benefit or harm the quality of the relationship. Besides, the quality of the partner relationship is important for the well-being of potential children.

Besides studies that directly link factors such as the above-mentioned to childbearing, there is a literature that focuses on the costs and rewards that people attach to having children; this started with a study by Hoffmann and Hoffman (1973) on the value of children (see Liefbroer, 2005 for an overview of the value-of-children literature). In such studies the perceived costs and rewards, usually measured with standard questionnaires, are either connected with childbearing desires and intentions, or prospectively or retrospectively linked to actual childbearing behaviour. Since children are no longer needed for securing parents' old age or for contributing to household income, the emotional value is assumed to have increased (Ariès, 1973; Shorter, 1975). Indeed, Fawcett (1988), in summarizing the value-of-children literature, concludes that the most important rewards of having a child are psychological in nature and the major costs are financial ones and opportunity costs related to career loss. Similarly, in reviewing some Dutch studies on the motivations for parenthood, Knijn (1997) concludes that emotional-affective motivations are of overriding importance. In this study we will examine if and how arguments and motives based on potential costs and rewards of having children and other factors discussed above play a role in people's own deliberations on having their first child.

5.3 Methods

5.3.1 Sample selection

The 33 couples that participated in this study were selected from the first wave of the Netherlands Kinship Panel Study (Dykstra et al., 2005), a large-scale nationally representative survey among 8,161 inhabitants of the Netherlands held in 2002 and 2003. We first selected heterosexual couples who had at least one newborn child in or after 2000 and who did not have children from prior relationships (because we wanted the couple's first child to be a first child for each partner). As we were interested in couples who had their first child either at a relatively young or a relatively old age, we selected among these couples the "youngest" 20% and "oldest" 20% parents. This was based on the woman's age at first birth being either 25 years or younger or 33 or older, and her partner preferably being older for the old couples and not too much older for the young couples, since we also wanted the men to be relatively young or old fathers. We approached these couples with an introductory letter and a subsequent phone call to ask for participation, until we had enough participants. In total 101 letters were sent, and 85 respondents were reached by phone. Of those, 40% participated in our study.² The response rate was negatively influenced by the fact that both partners had to be willing to participate (women were more often willing than men) and to be available at the same time, and that in the same period these respondents were approached to participate in the second wave of the main NKPS survey. The interviews were conducted between November 2006 and April 2007 by the first author and two other interviewers.

5.3.2 Interview method and analysis

The main data collection method was the couple-interaction interview – a face-to-face, semi-structured interview with both partners. Bernard (1972) signalled "his and her marriage": partners may experience the same marriage in a different way, hence they may also experience the decision-making about their first child differently. Besides, an advantage of interviewing partners together is that such interviews stimulate recall and clarification among participants, and partner interaction can result in a fuller account of the topic (Allan, 1980). Although previous studies have shown that during such interviews partners do talk about past or present disagreeing views or conflict (Knijn et al., 2006; Wiesmann et al., 2008), it has also been shown that spouses are less likely to reveal their own viewpoints in a joint interview (Hertz, 1995; Zipp & Toth, 2002; Boeije, 2004). To meet this potential weakness and to make each partner aware of his or her individual ideas and desires, each partner completed an individual questionnaire at the start of the interview. Besides background information, in this questionnaire respondents were asked

² In total 34 couples were interviewed, but we decided to exclude one couple from the analysis. This couple adopted their first child when the woman was 33 and the man 35, but they had been trying to have a child since the woman was 26. Hence they do not really classify as "postponers".

about their personal desires and intentions in the past and present, and about satisfaction with the timing of the birth of each of their children. They were however informed in advance that the interviewer would use their answers in the couple interview. In addition, each partner filled out a life history timeline containing details on partnerships, births, education, work and house moving (migration), to create a simplified form of a "life history calendar" (Freedman, Thornton, Camburn, & Young-DeMarco, 1988). The use of such a document by interviewer and participant during the interview can improve the quality of retrospectively asked information (Freedman et al., 1988).

A life course perspective was used in the interaction interview (Scanzoni & Szinovacz, 1980). First, respondents were asked to tell something about the family they grew up in, then it was discussed if and how they thought about having children when they were in their late teens and how these ideas developed later on, possibly within relationships prior to their current relationship. The main emphasis of the interview was on the decision-making process on having children within the current relationship, and we asked about deliberations, agreeing or disagreeing ideas, communication, negotiation etc. In order to stimulate thinking and talking about which motives and arguments were important to respondents, the interviewers used cards that mentioned issues which might play a role in deciding about having children. Each partner was asked separately to select those cards with topics that had been important to him or her, to put these in order of importance, and to explain why and how these issues played a role. They could use blank cards to add issues and also indicate which issues were absolutely unimportant to them. Topics referred to different types of potential arguments and motives, such as practicalities (e.g., housing), biological clock, religion, norms, youth family experiences, or to terrains on which children can bring costs of rewards (e.g., freedom, career, relationship quality). The cards only contained one or a few keywords, mostly without indicating a direction (pro or against childbearing, delaying or speeding up the decision), so that respondents would explain in their own words how certain issues played a role in their decision.

The interviews were held at the respondents' home, and completing the questionnaire and the interaction interview took on average two hours. All interviews were recorded electronically, fully transcribed and read to get broadly acquainted with the couple's story. Summaries and memos were written throughout this process. Next, transcripts were coded and analysed using MaxQDA, a computerized program for coding and fragment retrieval of qualitative data. During this period the codes, emerging themes and concepts were discussed with the co-author (peer debriefing) in order to verify the interpretations.

5.3.3 Description of the sample

Of the 33 couples, 17 had their first child at a young age and 16 at an older age. Most of the young parents were in their late twenties or thirties at the time of the interview, whereas most of the older parents were in their forties. The young mothers had their first child at a mean age of 23.2 and their partners were aged 25.4 on average. The older

mothers and fathers entered parenthood when they were aged respectively 35.1 and 37.6 on average. In both groups, two-child families were most prevalent. Only a few couples had one or three children at the time of the interview. Among the young parents there were also four couples with four or five children; these were orthodox protestant couples. Among the older parents there were also a few religious couples, but not orthodox.

Of the older parents, all but two couples were married when their first child was born. Only half of the young couples were married when they had their first child, some of them married later. Among the older group, both partners in nine couples followed higher professional or university education, of the other couples one or both partners had at least upper secondary vocational training. Most men and women in the young group were educated at a low or medium level (no higher than upper secondary vocational school). Four out of the five young couples in which one or both partners did have higher professional or university education were either strictly religious or their first child was unplanned. Finally, most respondents were Dutch and a few were Western immigrants who had partnered a Dutch person. The couples lived throughout the Netherlands, in urban and rural areas.

Most of the differences on these background characteristics between the young and older parents in our study are also found between the samples of young ($N = 125$) and older parents ($N = 117$) in the NKPS dataset from which our respondents were drawn (see subsection 5.3.1 for sample criteria). Average ages at first birth in our groups and in the NKPS samples are almost identical. Of the young parents in the NKPS dataset, 17% has four or more children, while only 1% of the older parents has four or more children (at the time of the survey, which is 3 to 4 years before our interview). About 13% of young fathers and 10% of young mothers are higher educated, whereas about half of older fathers and mothers are higher educated. Furthermore, while about a quarter of the young parents in the dataset attends church at least once a week, none of the older parents visit church with this frequency. However, the high proportion of older parents in our study that was married before the birth of their first child deviates from the proportion in the dataset, which is about 60%. About the same proportion of younger parents in the dataset was married before the birth of their first child.

Typically, the older parents in our study met each other at an older age than the young parents, and also had their first child later into the partnership. In the NKPS samples the relationships in which the first child is born started when young and older mothers were aged 18 and 26 on average. Examining our respondents' "partnership routes" from dating to the birth of the first child in more detail, several patterns in each group can be distinguished. The most prevalent pattern among young parents is that the partners met each other when they were in their teens – in a few cases the man was in his early twenties – with the birth of their first child taking place 5 to 9 years later, after a few years of cohabitation and sometimes marriage. The other young couples had their first child sooner after the start of the relationship: four pregnancies were unplanned, and there are four protestant orthodox couples who started dating around age twenty and married

within a couple of years. They waited with sexual intercourse until marriage, and did not use contraceptives. These strongly religious couples all had their first child about one year after marriage. Finally, two non-religious couples had a planned child soon after the start of their relationship. They started living together soon after they met, and one or both of the partners in these couples had cohabited or been married before.

In the group with the most prevalent pattern among the older couples, the partners started dating halfway in their twenties and had a first child 8 to 14 years later, usually after several years of cohabitation (up to 10 years), and all but one couple after marriage. This pattern resembles the most prevalent pattern among the younger couples, but the older couples met later and waited longer with having children within the relationship. Three couples had experienced fertility problems. They started trying to have a child when the women were about 30 years old, which is 5 to 10 years after the start of their relationship, and it took between 2 and 10 years before the women became pregnant. Four couples met when both partners were age 30 or older (up to age 43), after which cohabitation, marriage and childbirth followed quite quickly. All but one of the partners in these four couples had cohabited or were married at least once before. Two couples met in their late twenties and had a child within 5 years. All young and older mothers, except for those with unplanned pregnancies and those in couples with fertility problems, became pregnant within a year – usually within a few months – after the couple stopped using contraceptives (or started sexual intercourse in the case of very religious couples).

To summarize: the young couples met each other at a much younger age, have lower educational levels or are more strictly religious than the older parents. Does this imply that they also deliberated differently about the decision to have a child?

5.4 Child wishes

“I assume that I was born with a desire to have children”, said a woman who had her child at age 20 in reaction to our question on how she thought about having children when she was around 18. In contrast, a man started laughing and could not imagine that any young man would even think about having children. Since insight into decision-making starts with knowing preferences (Scanzoni & Szinovacz, 1980), we asked respondents about the – possibly changing – ideas and wishes with regard to age of entry into parenthood and numbers of children they had from about age 18 onwards. Only a few men and women were once sure that they would not want to have children at all. Many current parents used to have a latent child wish: they had never imagined themselves staying childless, but did not give the issue much thought when they were younger. Some claim they really did not give having children any thought at all for a long time, like the man who did not think about the possibility of having children until a second partner raised the issue when he was 34 years old. Apparently one can easily disconnect oneself from the idea of having children even if children are nearby. This man’s sister had children long before he had. Yet, he says that “she was in such a different world”, that this did not make him think about having children himself; it did not apply to him.

Comparing old and young parents, the most striking difference is that most of the women who entered parenthood young say they had a strong child wish, while the child wishes of young men and older mothers and fathers varied more. Young mothers also stand out in the sense that as teenagers they knew that they wanted to be a young mother (although exact ideal ages were not mentioned), while this was not mentioned so often by young fathers.

Child desires and intentions are of course not static (Heaton, Jacobson, & Holland, 1999; Liefbroer, in press); especially among those women who entered parenthood late there are some stories of changing or ambivalent child wishes. Sometimes the child wish was “generated” by the partnership. Some men did not want children until they were in a “now or never” situation.

Finally, many women talked more extensively about the child wishes they had when they were younger than most of the men. An explanation for this might be that women are better able to disconnect parenthood and partnership than men. According to Townsend (2002, p. 84), “there is an asymmetry in the ways that men and women think about becoming parents. Women are able to weigh and articulate their specific desire for children outside the matrix of the family and the relationship with a man. . . . The men I talked to did not talk about having children without talking about having a family or being a family man. For these men, having children was part of the package deal of being married and having children”. In contrast to Townsend, some men we talked to had a strong child wish at a young age, which they often related to the fact that they liked playing with little cousins, nephews or nieces. Yet, only women had clearly considered motherhood separately from partnership when they were younger; some thought about how they would arrange things if they became pregnant as a teenager or about having children outside of a partnership, as Jessica³ did:

Jessica: I never imagined myself childless. No... But I did imagine myself as a lone mother (laughing).

Bob: Did you?

Jessica: Yes, at the time my parents got divorced, I thought: I will have children by myself.

Other women, however – like many men – did not think about children at all before they met their partner.

5.5 Implicit and explicit decision-making

5.5.1 To have or not to have children

For many of the couples we interviewed, the decision-making about having a first child consisted of two steps. First, partners decided that they want to have children, and then,

³ For reasons of privacy, the names of the respondents in this article are fictitious.

usually at a later stage of the relationship, the timing of the first child was decided upon. Actually, many people acted straightforwardly; over half of the couples we interviewed, but clearly more older than young parents, explored each other's child wish in the beginning of the relationship by explicitly asking about it somewhere in the first year of the relationship and before cohabitation. Most remember a specific conversation, others do not but say they are sure they talked about it. The few couples who met each other in their thirties or forties and had their child quite soon after that, already discussed the issue on one of the first dates. Among each of these couples, one of the partners had a strong child wish and for them it was a relationship prerequisite to have an agreement on having children – the more so if they had left their previous partners because they did not want to have children.

None of the couples who discussed whether or not to have children early in the relationship were confronted with disagreement. Either both partners already knew they wanted children before the relationship started, or the child wish emerged from meeting the right partner. Another option is feeling so committed to one's partner that one goes along with the other's child wish, as is expressed by David, who met Angela at age 24, followed by the birth of their first child 2 years later:

David: In my previous partnership, having children was not an issue. Maybe it would have happened... once, but not for a while. And when I met Angela, well... there are things I find important in a relationship and there are things she finds important in a relationship. And she was very sure she wanted to be a young mother, and I was very sure that I wanted to stay with her. So... I thought: Let's just start a family soon.

Like those older couples who made it clear from the start that they only wanted to get serious if their partner also wanted children, this young woman Angela was very explicit. The biological clock appears to be ticking at younger ages too. Even though she had more time, she did not experience it that way: she explains that she felt her biological clock ticking because she was so eager to be a young mother. Some of the partners like David, who did not have a clear child wish themselves, assert that they had never given any thought to having children until their partner started talking about it, and some were even surprised by the question yet still agreed.

In general, couples did not waste many words on the issue if it became clear that they both agreed on having a child some day. After this was expressed, they did not talk about it for a long while, sometimes years, until one or both partners thought it was time to have a child or at least to make concrete plans for the short term. How many children one preferred was usually not discussed in those early conversations, nor was the timing of the first child, as the following fragments illustrate:

Judith: When the issue came up for the first time, both of us felt like: We will have children once... And we went on with our lives. We never discussed when we would have them. And at a certain point I thought: About now.

Interviewer: When did you know that you wanted children?

Max: Quite soon after we met we knew neither of us was against having children. We knew that within a year after we met, I guess

Lisa: That we would once... indeed. But at that moment we hadn't yet ...discussed when.

Max: Yes, we had been clear that we both wanted it, and that was it.

Lisa: And it stayed like that for a good many years.

Max and Lisa started dating when they were 24 and 25, and had their first child about 9 years later. Some of the couples who met each other late and faced time pressure, were exceptional in making a time plan right away.

However, implicit agreement on having children still exists. Couples who did not mention having children early in their relationships sometimes refer to a greater sensitivity for each other's desires: "we felt the same", "we knew without saying how the other thought about it", "the desire for having children grew". Sometimes not mentioning the wish for having children is religiously based though. For these couples, marriage self-evidently brings children.

The story can also be really different if partners have or assume that they have divergent preferences. Some older couples did not discuss the issue of having children until they had been together for years because the women did not want to push their partners who were not "ready for it", as is obvious from the interview fragments with the following three couples: Ellen and Frank, who were 38 and 43 when their first child was born; Irene and Robert, aged 38 and 47 at first childbirth; and Peter and Kim, who became parents at ages 34 and 37:

Interviewer: When did you start to feel time pressure?

Ellen: Er, time really started pressing when I approached 40. When I was 37. Then I started to talk to Frank, like: "If we want children...", and I wanted them... But I always thought that Frank was not really interested in having children, that he'd let me have them. But if I think about it more deeply, I think he does enjoy them, that is now of course, that goes without saying, but then, although he was one of those men who don't really need to have children, he could see the fun or the happiness of having children. But he always wanted other things first; at work, the house wasn't finished... So it was always too early for him.

Later in the interview:

Ellen: Well, I did not have the idea that he wanted children. I still see him that way: as a man who does not have desires in that direction himself. He may not be yearning to have children, but I don't see him as someone that would say "please no" either.

Irene: I thought children were really fun and I thought it would give so much joy to have a child, or children, together, and to be able to raise, to bring up a child together... Yes, I really thought that could be very nice.

Interviewer: Did you think he didn't want to have children, in the beginning, or...?

Irene: Well, in the beginning I was sure he didn't want to.

Peter: You know, women determine that sort of thing, it's not a man's business.

Kim: But you were open to it.

Peter: Yes...

Kim: You could understand my wish, but for you our life without children was okay.

Peter: Let's just say I was not dying to have kids.

Interviewer: You didn't feel a desire...

Peter: No, I myself not... Now he [their son] is there, I enjoy it, but I did not feel a need to have a child.

At first glance, these couples' stories seem to be characterized by latent power mechanisms (Komter, 1989). They did not explicitly talk about their child wishes nor agreed that they would try to have children some day. Implicitly, the partners knew each other's divergent child wishes, and the men, who were not craving to have children, seemed to benefit from the status quo. What, then, are the characteristics of the turning point, what happened, and why was the decision to have a child taken in the end?

Ellen and Frank were renovating a house and this project took several years. Ellen explains that in her head she postponed having children year after year – especially since she assumed Frank did not like the idea of having a child while working on the house – until she really felt time was short and decided the house had to be finished after the first child was born. This was when she was 37. Then the decision-making became more explicit, although communication was one-sided: Ellen kept repeating that if they wanted children it should happen now, until Frank agreed. However, she also explains she operated diplomatically, by not raising the issue too often and by not mentioning yet that she actually wanted to have three children. Hence until Ellen was 37, it seems like Frank was indeed exercising latent power.

Taking a closer look at the two other couples' stories, their situation seems to be different. When their relationships started, the women did not think about having children at all. Kim indicates that she had always had the idea that she would have children, but her relationship with Peter started slowly and grew stronger very gradually. Besides, when she met him she enrolled in a 4-year full-time education program, so having children was not an issue at that moment anyway. After graduating she very much enjoyed her teaching job, and did not like the idea of putting a child in day care, which caused conflict with her child wishes. When Peter lost his job because of long-term disability, the opportunity to have a child arose: he would be the full-time homemaker. Eventually it was Peter who told Kim that now was the time:

Peter: It didn't really matter to me, to be honest. I'm rather easy. If someone really wants something, well, you only live once. It's like that with everything.

Kim: That's what you said indeed: "If you want to experience it, we should do it now. Now is the time."

Unlike Kim, Irene had not thought about having children before her relationship started; her desire for children grew gradually within the relationship. When she met Robert she was very ambitious, doing two studies and dreaming of a career as a musician. She explains that at that time she was only focused on herself, hardly had time for a relationship, and did not think about having children at all. However, her life became more quiet, the relationship went steady and her desire for a child developed. Robert, who once was sure he did not want to have children, had developed a more open attitude towards it over time, although both partners agree during the interview that they would not have had children if Irene had not wanted it. Unlike Peter, who claims he never really thought about the decision to have children, Robert weighed the pros and cons for a long time before agreeing to have a child. This however did not result in much explicit communication; both partners emphasize in the interview that they did not talk about the issue much. It was clear to both of them that she wanted a child, but he was not sure about it, so he thought about it by himself. An important aspect of Robert and Irene's story is that both liked their life as it was (with a lot of travelling), so when they decided to stop using contraceptives, their attitude was: "It's now or never, let's see what happens".

These stories show that the fact that the women did not have a clear child wish in the beginning and that they enjoyed their childless life may have contributed to the fact that the issue was not discussed for a long while. Hence these couples' postponement of parenthood cannot be attributed exclusively to latent power exercised by men. Although these couples would not have had children if the women had not wanted it, both women say they would also have accepted not having children. This is reflected by the fact that both couples had decided not to get medical treatment if a pregnancy did not occur naturally. In the case of Robert and Irene, this took 7 years.

We would like to note that it was not always the woman who had to convince her partner of having children, as in the cases we described above; in some cases the man was more willing to have children than the woman. However, among the couples in our study, those women were quite easily convinced by their partner. One man though divorced his previous partner because after 12 years she still doubted whether she dared take the step towards parenthood.

5.5.2 Timing of the first child

As mentioned before, most couples agreed early in their relationship on having children. The majority of young couples had implicitly (and rightly) assumed or sensed this, and the majority of older parents had explicitly talked about it. However, even if the wish to have children was explicitly expressed, the timing of the first childbirth was not discussed. At most, the partners agreed that they wanted to have children, but not for some time yet. Then the issue was off the agenda for a while. The next step in the process

of decision-making – *when* to have the first child⁴ – usually started when one or both partners thought it was (almost) time to have a child. Agreement was reached quickly, except in a few cases. Apart from the three older mothers Ellen, Irene and Kim, who waited for their partners to agree as we described above, only one young mother had to talk a lot – for about one and a half years – to convince her partner to become a parent. Despite his desire to become a young parent, he was afraid to make the decision and would actually have preferred it if his partner had gotten pregnant by accident. Deliberate planning is not an attractive strategy to everybody; to this young man, for instance, taking paternal responsibility for an unplanned child seemed more masculine than planning to have a child, which he thought of as “*petit-bourgeois*” in a way. Moreover, the freedom to choose implies the obligation to choose, and this man reasoned that if he would not take the decision deliberately, he also could not regret it.

And choosing can become problematic. Sandra and Tom, whose relationship started when they were 21 and 28, but did not have a child until 13 years later, also had divergent ideas on having children and discussed it little. Their dilemma was not so much whether they wanted to have children, but whether or not to have children *with each other*: At the start of their relationship they explicitly exerted their wish to have children within marriage. Whereas Tom was sure quite soon that Sandra was the partner with whom he wanted all that, she doubted for a long time whether he was “Mr. Right”. Tom patiently waited for Sandra to make the decision (which she did after following a course on “What do I want with my life?”) without much communication on the topic:

Sandra: We had not been together that long when it became clear that both of us wanted children. And that we wanted more than one. And that the logical order would be: getting married first, and then children. That was early in our relationship...

Tom: That has always been clear.

Sandra: Yes, it was clear early on. So we didn't have to talk about that endlessly.

Interviewer: Yes, exactly... And then the issue was...

Sandra: Dropped for a while. And then I thought: Do I want this? Is this the partner with whom I want to spend the rest of my life? Is this the one with whom I want to have children? That was the question for me. If I was going to marry someone, that man would be the father of my children. Well, and then...

Tom: And who you will be with for the rest of your life, because you don't intend to get divorced.

Sandra: Yes.

Tom: I would have wanted children earlier, and to get married earlier.

Interviewer: With her? So did you wait for her to decide, or something like that?

⁴ For those couples who did not talk and sometimes did not even think about having children until they were going to have their first one, just because having children was self-evident to them, these two aspects of the decision-making – *if* and *when* to have a children – are not really distinguishable.

Tom: Yes, I had to, didn't I? One needs two signatures...

Sandra: And you didn't raise the subject every day, didn't you? You didn't ask me how I felt about it every day.

Usually, though, couples agreed directly or soon on more concrete plans to actually have a first child. Timing was generally not discussed much in advance – except for one couple that decided to have children after the man finished an evening education, no long time paths were planned. Among the young couples timing was even less of an issue than among the older couples. Evidently, it was not an issue for those couples whose first child was unplanned, or for the religious couples who did not use contraceptives. But most of the young parents who had their first child some years after they met, did not talk about having children before cohabitation either. Sometimes the issue was not raised until after marriage, when the woman proposed to stop using the pill.

In addition, from most stories it became clear that the partners had not made individual time paths either, except for a few who had not-so-precise ideas in the back of their minds, such as having children before age 30, or not having them before age 30, or to work for “some” years before having children. In contrast with theories on lifestyle choices, quite a number respondents, especially young ones, but also some of the older parents, emphasize that they are not planners. Negative references are sometimes made to other people who do plan everything in their lives:

Barbara: It's of course very scary to say: “I will get married *then*, I'll buy a house *then*, we'll have a child *then*.”

Ben: I keep saying that we are not planners, we did not deliberately plan things like: I first want to build a career in order to make enough money, and then I want my house to be perfect, and then we'll see whether we want to have children. No, we take life as it comes, live our lives by the day.

To summarize: generally there was not much long-term planning or communication involved with the decision to have a first child among the young and older couples we interviewed. A difference between the two groups is that the older parents explicitly assured themselves more often of the partner's child wish early in the relationship than the young parents. This is a sign of explicit decision-making, but it does not involve extensive communication. Besides planning and communication, deliberate thinking is also an aspect of explicit decision-making (Sillars & Kalbflesch, 1989). Among our interviewees, this happened much less than theories on individualisation assume, which is made clear by the following fragment, in which David reacts to the interview as such:

David: You [towards interviewer] ask things one really never thinks about. Things happen, we are not really thinkers, we are doers. Like what you said about my child wish: first I

didn't have a child wish, and then I had one. It was not demanded by Angela. But it's funny to see that, at a certain moment, I turned from "no, no, no" to "yes"! It's funny, if you think about it...

To the extent that deliberate thinking about having children did happen, it was more common among the older parents and usually an individual issue.

One decision-making aspect found agreement among everyone we interviewed: they all thought that couples should only have a child if both partners agree. Hence each partner had veto power (Thomson & Hoem, 1998) – in other words, each person only wanted a child with their partner's consent or after giving consent.⁵ This clearly emerges from the stories we discussed, in which one of the partners was ready for children sooner than the other and either waited patiently and silently or actively tried to convince their partner, but a "double veto power or double consent norm" is also expressed by other couples who themselves did not have divergent ideas on having children. Finally, a difference in decision-making between young and old parents that has not come up yet concerns practical issues related to having children, such as work and child care arrangements. These are more extensively thought of and discussed by the older parents than by the young parents. Older parents usually discussed these issues before pregnancy though, when the decision to have a child in the short term was made, so such practical issues usually did not have a large influence on the timing. Young parents did not generally think of or discuss such practical issues until the women were pregnant, like Mark:

Interviewer: And did you discuss that beforehand, that you would reduce your working hours?

Mark: No, we'd never thought about that. It was like: Gosh, now we should work fewer hours. You just get into that automatically.

Young mother Nicole also explains that practicalities were not on her mind when she wanted a baby:

Nicole: Actually it was not until I was pregnant that we thought: Gee... Then you start thinking what to do about work, about babysitting. I hadn't figured that out beforehand. I just wanted to see what our child would look like. That seemed incredible to me, to see whether it would look like us...

In the next section we explore more extensively which issues played a role in the choice for and the timing of a first child.

⁵ For men whose partner got pregnant by accident the case was a little different: they could only choose to stay or leave, and to be a participant father or not.

5.6 Giving up freedom? Motives and arguments

Why does one want a child? To watch one's own child grow up. To recognize oneself in the child.

And:

To give love to a child and receive love from it. That's the most important; the rest...

These statements reflect the importance of the emotional aspects of having children. The desire to "give love to a child and raise one's own child and see it grow up" was the major motive for our respondents to have children, combined with the condition of having a good relationship. Such motives did not cause much thought or discussion among the couples in our study. However, in previous relationships the quality of the partnership had been an issue in the decision not to have children. The idea that couples who are unhappy with their relationship might have children to improve the relationship is recognized; some couples even mention examples of this among couples they know, but all express disapproval because it would not be fair to the child to be born in such a situation. With a few exceptions our respondents did not feel like they were influenced by norms on having children. Actually, the norm seems to be that the decision about the first child is purely made by the couple and does not involve anyone else's opinion, or anything that is not important to them. It has to be noted in this respect that our sample consists of people who do have children as the majority of the population, but who deviate from age standards at first childbirth.

An issue that is mentioned frequently by men and women, young as well as older parents, is the experience with or memories of their own youth in their family of origin. If they had pleasant memories, this was a reason to create a family of their own. Those who had a bad childhood wanted to do a better job than their parents, although initially some of them did not want to have children because of the lack of a good example. The influence of births among siblings and friends can go in two directions; sometimes it makes people feel like having children – for some it was even the immediate reason to have children. This kind of "contagion" (Bernardi, 2003) corresponds to common sense. Yet, observing the consequences of having children can also evoke reluctance towards having children.

The biological clock is mentioned by almost all older mothers as having been very important for the timing of their first child. Only half of the older fathers mentions this, either referring to the biological clock of their partner or to their own age. They did not want to become too old a father, so they would have some energy to play with the children and not be mistaken for the grandfather at the schoolyard. Remarkably, the biological clock is also mentioned by a few young parents, both women and men: they explain that they felt some kind of time pressure because they really wanted to be young parents. Good housing is an important condition, but only plays a role in the timing of having a first child. Buying and or renovating a house sometimes took more time than expected, which resulted in some postponement of the first child.

We find more complex patterns when examining whether or not limitation of one's freedom was considered to be an important issue in decision-making about having children. This is often assumed to be an important reason for postponing children. The 2003 Netherlands Fertility and Family Survey (Statistics Netherlands, 2003, own analysis) shows that about 50% of men and women who did not have or try to have children before the age of 30 (women) or 33 (men) indicated "the wish to enjoy freedom first" as one of their reasons for postponing parenthood (they could indicate more than one reason).

Also among the parents in our study, reference to a loss of freedom is not uncommon. These parents anticipated that the transition to parenthood would imply a limitation of freedom. The expression used here is that "(the good) life stops" when one has children, as illustrated by Linda, who explains that she met her partner at age 30 and definitely wanted to make a far journey before getting pregnant:

Linda: You know, I had just found my great love, then you just want to *live* for a while, first.

Ronald who had his first child when he was 38, says:

Ronald: I can't image myself having had children at age 24. It was not on my mind then, I was not ready for it, I didn't want it. If I saw people my age pushing a baby buggy, I thought: My God, what are you doing? Life has just started and you're already pushing a baby buggy.

However, not all parents agree with the "end of freedom" idea. Naomi, a young mother, explains that she does not understand why some people postpone having children:

Naomi: Well, more and more people have children at an older age. And why...? I don't really know. I always thought it would be fun to experience it when you are young! I don't look at it this way: I want to *live* first, and then have children, because, with children, you also have a life!

And another young couple:

Rachel: I don't feel like I'm restricted in my freedom, travelling, going out, now that I have children.

Paul: Yes, we do everything we want in consultation with our children. We do as much as possible together with the children.

Rachel: Yes, but if we want to go out just the two of us, we arrange for a babysitter. That's what I meant.

Paul: Yes we do.

Rachel: It's not like... We know a couple and they really live *for* their children. I mean, I really like children, but if I feel like going out at night, I arrange for a babysitter and do

something. That couple really wouldn't do that. When I see that, I think: that would really feel confining. Some people say: you are *so* restricted once you have children...

Paul: That's nonsense.

Other young parents did feel like having children would restrict their freedom, but say they did not mind; they were not interested in going out or travelling to exotic countries, like Karen, who became a mother when she was 22 years old:

Interviewer: Do you also see disadvantages to young parenthood?

Karen: I don't really, not for myself, because I'm not so pushy, not a career person. But I think that for people who love to work a lot, or love to go out, or really want to do this or that... Yes, for them there is a disadvantage. Because you can't go anywhere you want. You're quite restricted. But... for myself I don't see a disadvantage. I like it like this.

Some older parents appear to have struggled more with the idea of losing one's freedom. Besides limitations to travelling, reluctance towards stricter daily schedules, the fuss and organisational schemes as well as the responsibilities that come along with having children were their obstacles, as the following older parents point out:

Robert: Life was all about doing fun things, and I had already noticed from watching my sisters that as soon as children arrive, everything changes, schemes become very tight. And I thought: I'm absolutely not ready for that yet.

Steven: The consequences of having a child, we did discuss that. Like: How do we arrange things at work when the child is ill? Who takes the day off?

Laura: I thought it would be a very, very big step. And to me it was, er... a concern. It really felt like that. And we were really thinking about how we would do everything and I found it all very complicated.

Steven: Responsibility for a child...

Laura: Yes, and also, how do we fit it into our lives, while both of us have a job, how to handle all that? I thought it was a big thing. I do remember that.

Cindy: When I looked at my brothers and sisters, who already had children by then, I thought: Gee, I can't do all that, it's awful... What a... I always kept myself removed from it. Maybe that sounds weird, but I pushed it away from a certain moment onwards. Because it seemed really difficult to me.

Clearly, these respondents saw the transition to parenthood as a "heavy" step. Others, more often young parents, say they stepped into parenthood pretty mindlessly and did not care so much about responsibilities or practicalities in advance, as the following fragments illustrate:

Nicole: I kind of stepped into it blindly. I never thought about whether we could afford it.

Dennis: Well, at that age, I was in a relationship at a relatively young age, I already had a steady girlfriend when I was 14, and then I already thought about children. I thought about that rather early. And I never thought children would be troublesome, I never said that it would be a big responsibility. Maybe that's because I come from a big family.

Interviewer: So it was not like you had everything settled first; owning a home and...

Jacob: No, not at all. We had no jobs and no...

Christina: No, actually we didn't have anything (laughing).

Jacob: No permanent housing.

Christina: Yet, it was a wonderful time. I don't think I would have wanted it any other way.

Jacob: I think we would do it all over again the same way.

Christina: Yes.

Interestingly, in contrast with the older parents who indicate they worried about losing their freedom before they decided to have their first child, other older parents explicitly state that thoughts about limitation of freedom did not play a role in their decision-making process, despite the fact that they also experienced an (extended) childfree period in which they enjoyed their freedom to go out, travel and/or spend a lot of time on their career, whether as singles, in previous relationships or in their current relationship. These parents explain that the idea of having children did not come up at all during those years, so they also did not worry about anything. Nor did they plan ahead, as in "after our world trip, we can have children". Not until these respondents felt like they had seen and done everything did having children become an issue. In this phase of life they no longer dreaded loss of freedom or responsibilities, as Daniel, who had his first child when he and his wife were 40, and Tom tell:

Daniel: Before this, I was in a relationship in which I did have the freedom to travel... Well, we both got to experience that, so we didn't have that hanging over our heads.

Tom: I saw with friends who already had children that you were more limited with travelling, and when getting together with friends. We used to have a lot of freedom. We gave each other a lot of autonomy in making appointments. Sometimes she would stay overnight somewhere, sometimes I would. With a child you cannot do that anymore. We were aware of the fact that our trips, our vacations would be different. But did that play a role in the decision-making? No.

With regard to the role of study, work and career in decision-making among older parents we see a similar pattern. Sometimes they deliberately planned the timing of having children in relation to study and career, or anticipated friction between having children

and work. More common however is the absence of such planning or dilemmas because one started thinking about (the timing of) children later. The older parents who selected the card with study/work/career were mainly women. They indicate that they wanted to continue working after the birth of their first child, but describe themselves as not career-oriented and work part-time, which is typical for the majority of Dutch women. The few men who say that study or work played a role in the decision-making were either a special situation, for example following evening education besides a job, or refer to their partner's study and work situation. The Netherlands Fertility and Family Survey from 2003 shows that only about one in ten men who did not try to have children before age 33 indicated "wanting to gain working experience or make a career" as one of the reasons for postponement of having children, while over one in four postponing women did (own analyses). Those older mothers and fathers who explicitly say that study or career was not a factor of importance at all, had already made a career when they started thinking about children. Hence they never faced a dilemma or planned the children ahead. Although the fact that they were studying or starting a career might have been a reason for not thinking about children earlier,⁶ they did not experience this as a factor of influence, as is explained by Daniel:

Daniel: No, you know, and of course the advantage is also that, er... you already made your career, so you don't have to worry about that. So the drive, like: I have to do this and I have to do that – we'd already had that.

Irene very explicitly clarifies that, for her, education and career are not related to the timing of her child, despite the fact that she used to be very busy with two studies, and says she used to be very self-focused and ambitious about a career as a musician:

Interviewer: Education, work, career, were those things an issue for you?

Irene: No, things went like that by accident, I mean, I used to be busy with my studies and with my career, but that has nothing to do with having children. It's not like I thought: I will finish my education first, then have a career, and maybe then have a child. No, when I was busy with those things I did not think about children at all.

In general, for the young parents studies and career were less important than for the older parents. Only a few of them selected the card with study and career, predominantly those whose first child was unplanned; they had worried that the unplanned pregnancy would hinder them in finishing their education. Many of the younger parents, however, explicitly mention that they do not care so much about having a career. Sometimes they seem to feel like they more or less deviate from "the norm" with regard to careers or self-development, and explicitly mention that they know that other people want to have a career – or travel – before having children, but that they were not interested in that.

⁶ Having children before finishing full-time education is very rare in the Netherlands and is not supported by policy, therefore having children while studying is probably not thought of as an option at all by most people.

In general, there is reasonable agreement between the issues partners mention to have played a role during the decision. Although they selected their own cards, and were asked to reflect on them in turn, often a “we-story” (couple level) about what was important to them emerged. One might expect that divergence in what one found important in making a decision about (the timing of) the first child might result in discussion; yet, we did not find a clear pattern between degree of agreement in motives and arguments and degree of communication during the decision-making process. Divergence in what partners found important can coincide with a very implicit decision-making process, and among the few couples who communicated a lot during this process, some have almost identical lists and others different lists. Identical lists of motives and arguments of course do not imply that partners are ready to have children at the same time.

Finally, it has to be noted, that the request to select cards with arguments and motives did not make much sense to some people. Especially young couples who had a very implicit decision-making process stressed that “the feeling” – the desire for a child and the feeling that one is ready for it – was all that mattered.

5.7 Conclusion and discussion

The standard biography in which partnership, marriage and having children were inextricably bound together has been replaced by a choice biography; people decide if they want to have children, with whom and when. Authors like Giddens (1991, 1992), Beck, and Beck-Gernsheim (Beck 1992; Beck & Beck-Gernsheim, 1995, 2002) emphasize the importance of lifestyle choices and sketch modern individuals and couples who plan, reflect and negotiate. We applied this theoretical view in an empirical study of a crucial lifestyle choice: the choice to have children and when to have the first. In-depth interviews with 33 Dutch parental couples were used to investigate the nature of the decision-making process that precedes the birth of a first child. We focused on the extent to which the decision-making process was explicit or implicit (Sillars & Kalbflesch, 1989) and on the motives and arguments that were important to people. Whereas Giddens, Beck, and Beck-Gernsheim describe explicit decision-making as a central characteristic of individuals and couples of our times, we compared couples who had their first child at a relatively young age with couples who did so at a relatively old age in order to detect possibly contrasting decision-making patterns; we expected more extensive and explicit decision-making processes among couples who had their first child relatively late.

The older parents typically met each other at a later age than the younger parents, and waited longer with having children within the relationship, although the dominant pattern among young couples was to have the first child at least 5 years after the offset of the relationship. Young mothers typically reported to have had strong child wishes since they were young, the child wishes of young fathers and older mothers and fathers varied.

In the view of our theoretical framework, the most remarkable finding is that the decision-making among the couples in our study was generally quite implicit. For most

couples the first birth was clearly based on their own choice, but there was not much long-term planning – whether individually or by couples – and not much communication involved with the decision to have a first child. This is true not only for those couples who had their first child at a relatively young age, but, perhaps more surprisingly, also for many of the older, mainly highly educated, couples. A difference between the two groups is that among older parents the decision-making about having children consisted more often of two steps: first the couples decided to have children, and in a later stage of the relationship the timing was decided upon. Hence older parents assured themselves explicitly more often of their partner's child wish early in the relationship than young parents, while young couples agreed implicitly more often on having children. This probably implies that older parents found having children less self-evident than young parents. Although such a conversation at the beginning of the relationship is an indication of explicit decision-making, it does not involve extensive communication, discussion or negotiation.

Communication and proactive planning are not the only characteristics of explicit decision-making though. Thought and reflection is another aspect of explicit decision-making (Sillars & Kalbflesch, 1989). In general, such deliberate thinking on having children happened much less than theories on individualisation and life choices assume. To the extent that deliberate thinking about having children did happen, it was more common among the older parents. Some of them did have some doubts about having children either when they were still single or after having met their partner. However, such thinking was always an individual issue; even when the partners of these doubters knew about their reservations, it did not result in extensive communication or negotiation. Yet, for most of the older parents, having children was just not an issue that was on their mind during most of the years that they “waited” with having children.

Despite the lack of extensive communication, all respondents who planned their children placed much emphasis on the importance of both partners' consent before trying to have a child. Some of our couples' stories nicely illustrate the potential processes that are caused by this veto power principle; it can lead to separation if the disagreement about having children seems to be irreconcilable, but also in years of waiting by one of the partners, either silently or by repeatedly making clear that the biological clock is ticking, until the other partner has solved his or her doubts or realizes that it is “now or never”. This illustrates how partners' linked lives influence fertility decision-making. Of course the veto power might also result in forgoing one's child wish and staying with a partner who does not want children. Such couples without children were not in our sample, but some partners of “doubters” in our study said that they would also have accepted it if their partner had eventually not wanted children.

With regard to arguments and motives that were important during the decision-making process on whether and when to have a first child, we found interesting patterns concerning anticipated loss of freedom, and with regard to careers. Characteristic for the older parents is either a reluctance towards the limitation of freedom, adjustment

of lifestyle and responsibilities that one expected to come along with children, or not thinking about having children at all until one is ready to give up some freedom, usually after an “extended” period in which life was full of other things, such as study, career, friends, going out, or exotic travel. In such cases the costs related to loss of freedom seem to have influenced the timing of the first birth, but are not deliberately considered, or at least not until such costs are not perceived to be important anymore. No gender differences were found here. Similarly, some higher educated parents, men and women alike, emphasized that study and career had nothing to do with their decision-making on having children – they did not consciously plan the birth of their child in relation to their career because they did not start thinking seriously about having children until they had finished their studies and worked at least for a few years. This probably reflects how self-evident it is for a certain part of (higher educated) people to postpone children until after one has entered on or even made one’s career. However, experiencing a dilemma between work and having children or deliberately planning the first child in relation to study or career does also occur, especially among women. This shows that different processes can underlie quantitatively demonstrated relationships such as the effect of education on postponement of the first birth: some deliberately postpone their child, others just do not think of having children.

Characteristic for young parents is not bothering about the potential limitation to one’s freedom due to childbirth. This can be because they anticipate continuing to live life as they used too with few adjustments. Another reason is that they do not mind being more bounded, the more so if they are not so much interested in self-fulfilment in other areas than parenthood. Sometimes this absence of worries about loss of freedom goes together with absence of worries about practical arrangements, like finances or work and care logistics. In their stories, these couples emphasized more how much they looked forward to the joy of having children. Especially young mothers had a strong child wish since growing up.

An advantage of this study is that we interviewed both partners in a couple, which made the stories about the decision-making process more inclusive. It made clear that a couple’s decision process is often a shared experience, but that it can also consist of two rather individual yet interdependent processes if one partner has made up his or her mind earlier than the other. Another special feature of our study is the focus on couples who had their first child either earlier or later than average. This way we expected to find the most variety in the decision-making process. We indeed found differences in decision-making patterns, but overall we found that not only deciding to enter parenthood early, but also postponing the birth of the first child, may be quite an implicit process. Hence we emphasize that our study suggests that a first birth is not typically preceded by an extensive and explicit decision-making process as sketched in theories on individualisation and lifestyle choices. This theoretical perspective was our starting point, but our study also forms an interesting extension to demographic literature on fertility, which also tends to assume that births are preceded by deliberate decision-making. We found, for instance,

that costs and rewards are not always deliberately considered. For many people who do have children, the choice to have them might have been self-evident, and the planning of the first child does not have to be experienced as a complex process influenced by many factors, not even if the first child arrives years later than average. We think this deserves to be highlighted, amidst all the attention, scholarly as well as in the media, to the complexity of the choice for children and the dilemmas surrounding it (Gerson, 1985; Van Luijn, 1994; Raad voor de Volksgezondheid en Zorg, 2007). This does not seem to be a general pattern; quantitative research, however, can shed more light on the frequency of different decision-making patterns among parents (to be).

A drawback of our study is the retrospective nature of the interviews. This is however inevitable if one wants to study a process of which the outcome is known (whether and when the child is born). We tried to contain this problem by using a life history timeline, by chronologically structuring the interview and by emphasizing time references in the questioning. Yet, studies of couples who are in the midst of the decision-making process on having children could form an addition to our study. In addition, more explicit decision-making might have occurred among people who chose not to have children (see Cooper, Cumber, and Hartner (1978) and Carmichael and Whittaker (2007) for studies on the decision to remain childless). Finally, it would be interesting to examine in what ways decision-making on second, third and subsequent children differs from decision-making on first children, and how entering parenthood early or late influences subsequent childbearing decision-making. Our interviews are also suitable for studying these questions.

Chapter 6

Conclusion and discussion

6.1 Introduction

Having a child is often considered one of the most influential events people experience over their life course. Nowadays this event tends to be a matter of choice. Applying a linked lives perspective (Elder, 1994, 1998, Elder et al., 2003), this study aimed at gaining more insight into fertility choices and behaviour by examining the ways in which fertility is embedded in the family of origin and in the partner relationship. In particular, we investigated the effects of social interaction within family and partner relationships on fertility and studied couples' actual decision-making process regarding having a first child. Several aspects of fertility were incorporated, such as timing of the first childbirth, chances of having a (next) child and number of children at the end of the reproductive period.

We extended research on the influence of childhood family circumstances on subsequent family formation, by not only taking into account direct intergenerational transmission of fertility behaviours and social status effects but also the nature of family relationships. Furthermore, we examined the effects of partner relationship quality on childbearing, which is a relatively understudied research area. These studies on determinants of fertility were complemented with a study on the actual decision-making, the social interaction between partners in this process being one of the key foci. Analyses were carried out using survey data from the Panel Study on Social Integration in the Netherlands (PSIN; Liefbroer & Kalmijn, 1997), the Netherlands Kinship Panel Study (NKPS; Dykstra et al., 2005, 2007) and qualitative interview data ("NKPS minipanel").

In section 6.2 the main findings of this thesis will be recapitulated and the research questions will be answered. Section 6.3 discusses the main conclusions, the contribution to the literature and societal implications of this study. This chapter concludes with some limitations of the present study and suggestions and directions for future research (section 6.4).

6.2 Summary of findings

The literature on the influence of the parental home on family formation usually points to direct transmission of demographic behaviours, or to the influence of social status. We proposed an additional socialization mechanism, arguing that fertility preferences might also be rooted in experiences of family life. Hence the first research question of this dissertation relates fertility behaviour to the social interaction within the family network that people experienced in their childhood and early adolescence:

- 1) *How does the nature of relationships in the family of origin affect fertility behaviour?*

This research question was answered in chapter 2. We made use of the first wave of NKPS (2002–2003), a large-scale survey on family relations. Two aspects of fertility behaviour were taken into account: age at first birth and number of children at the end

of the reproductive period. Effects of the nature of family relationships are examined in a broader family context by also including the parents' fertility pattern and the social status of the family of origin. We discuss findings of the latter before answering the first research question.

First, fitting findings of earlier studies on the intergenerational transmission of timing of first birth (Manlove, 1997; Barber, 2000; Steenhof & Liefbroer, 2008), we found that the younger parents are at first birth, the younger their children are at first birth. Most previous studies investigated only the transmission of age at first birth from mothers to children and suggested that the transmission from mothers to daughters was somewhat stronger than that from mothers to sons (Furstenberg et al., 1990; Horwitz et al., 1991; Barber, 2001). Our study, however, took into account mother's and father's age at first birth and indicated that daughter's age at first birth is influenced by both, while son's age at first birth is influenced only by father's age at first birth – that is, the effect of mother's age at first birth on son's age at first birth disappears when father's age is taken into account. We also found that the larger the number of siblings, the larger the number of own offspring, which is in line with earlier studies on the intergenerational transmission of family (Pearson & Lee 1899; Berent, 1953; Duncan et al., 1965; Johnson & Stokes, 1976; Zimmer & Fulton, 1980; Anderton et al., 1987; Murphy & Wang, 2001).

In addition, a number of indicators of the social status of the family of origin influence timing of first birth as well as number of children. The higher the mother's and father's educational attainment and the father's job status, the more their children postpone the first birth. A mother's education also negatively affects her children's number of births. The effects of a mother's educational level on her children's age at first birth and number of children seems to be largely independent of the transmission of social status, while the effects of a father's education and job status are completely mediated by the child's educational attainment. People who grew up with religious parents have more children than children of non-religious parents.

Our study showed that, on top of these demographic and socio-economic characteristics of the family of origin, the nature of relationships in the childhood family network also affects fertility behaviour. The experience of conflict between parents when growing up results in postponement of the first child and in having fewer children. Childhood experiences in the extended family appear to matter only for fertility timing: children from families with many overnight family visits start childbearing earlier. An alternative hypothesis, stating that positive family experiences during early adolescence strengthen the intergenerational transmission of age at first birth and number of children, was not confirmed. Daughters and sons are affected by their childhood experiences of family life in the same way.

The second research question addresses fertility in the context of the partner relationship, and can be subdivided into two sub-questions:

2a) How does the quality of the partner relationship affect fertility behaviour?

2b) *What is the nature of couples' decision-making processes on having a first child?*

Whereas the consequences of having children for relationship quality and stability are well studied (Cherlin, 1977; Glenn, 1989; Waite & Lillard, 1991; Kurdek, 1999; Helms-Erickson, 2001), research on the opposite influence of relationship quality on fertility is relatively scarce. Chapter 3 addressed Research question 2a, using data of three waves (1987–1995) of the PSIN, a panel survey that follows transitions to adulthood of a sample of Dutch young adults. We examined the effects of several dimensions of relationship quality: positive partner interaction, negative partner interaction, value consensus and separation proneness.

Our analyses indicated that positive as well as negative partner interaction decrease the likelihood of first and of higher-order births. These findings reveal a more complex association between relationship quality and fertility than we hypothesized. We expected that relationship quality would either have a positive or a negative influence on fertility, but the findings do not clearly point in the direction of either of these hypotheses. They suggest that couples are most likely to have a child when they do not have too much negative interaction – i.e. when the relationship is good enough – but when there is not too much positive interaction between them either. Couples with high levels of positive interaction might see having a(nother) child as a threat to their happiness, while couples with low levels of positive interaction might want to have a child to revitalize their relationship. This interpretation also fits our finding that value consensus negatively affects the likelihood of a higher-order birth. We did not find an effect of separation proneness on relationship quality, yet are cautious to conclude that there is no effect, since we only used a one-item indicator of separation proneness.

In chapter 4 we further examined the impact of relationship quality on childbearing employing a different sample and different dimensions of relationship quality, provided by the NKPS. In this study we used measures on partner support, partner conflict and overall relationship quality, which formed one scale. In addition, we could make use of reports of relationship quality from both partners in a relationship. On the basis of our findings in chapter 3, we posed a new hypothesis on the association between relationship quality and childbearing, that couples with medium levels of relationship quality are most likely to have a(nother) child. In conformity with this hypothesis, our analyses revealed a non-monotonic influence of women's perceptions of the relationship quality; women with medium relationship quality have the highest likelihood of having a first or second birth, while women who report the highest levels of relationship quality have birth rates in between women with low- and medium-quality relationships. Men's perceptions of the quality of their relationship appear to affect only higher-order births. This effect is positive, though non-linear; men who report medium and high levels of relationship quality are more likely to have a second child than men who report low relationship quality, with no difference between men with medium and high relationship quality. Each partner's perception of relationship quality affects childbearing independently of the

perception of the other partner; we did not find unique effects of disagreeing views on the quality of the relationship. Hence our analyses do not support the hypothesis that one partner's assessment of the relationship as unfavourable for having children is enough to inhibit childbearing.

In chapter 4, the effects of relationship quality on second childbirth appeared to be stronger than the effects on first childbirth. It seems plausible that relationship quality *at the time of the survey* is more relevant for parents deciding about having an extra child than for childless couples deciding about having a first child; if parents want another child, they probably want it within a couple of years after the previous one to avoid a large birth interval. The next conception is therefore likely to occur before the next wave (intervals between waves are 3 to 4 years). Childless couples who consider their relationship suitable for having children, might postpone having children beyond the next wave for other reasons.

Chapter 5 addressed Research question 2b on couples' decisions on having a first child. On the basis of 33 semi-structured in-depth interviews, we compared couples who had their first child at a relatively young age with couples who had their first child at a relatively old age. If one considers theories on individualization and lifestyle choices (Giddens, 1991, 1992; Beck, 1992; Beck & Beck-Gernsheim, 1995, 2005), the most remarkable finding was that the decision-making among the couples in our study was generally quite implicit. Most births were planned and based on both partners' consent, but there tended not to be much thought, reflection, long-term planning or communication involved with the decision. This applies not only to couples who had their first child at a relatively young age, but, contrary to our expectations, also to many of the older and mainly highly educated couples. Our interviews show that individual doubts and disagreeing child wishes do not necessarily lead to discussion between partners; quietly waiting until the other partner has resolved her doubts or changed his mind is another option. Among older parents the decision-making about having children consisted more often of two steps: first the couples decided to have children, and in a later stage of the relationship the timing was decided upon. Hence older parents more often explicitly assured themselves of their partner's child wish early in the relationship than young parents, although this usually did not involve extensive communication or time plans.

Characteristic for young parents was that they did not bother about loss of freedom when deciding about their first child, either because they did not anticipate many adjustments to their lifestyle or because they did not mind being more limited in their freedom. Some of the older parents deliberately postponed the transition to parenthood because they anticipated work and care dilemmas, and were reluctant to enter parenthood because of the limitation of freedom and the increase in responsibilities that they expected to come along with children. Many other older parents, however, did not experience such reluctance, because they only started thinking about having children when they were ready to give up some freedom. Before that – when they were students, enjoying nightlife, travelling around the world, building their careers – the idea of having children had just

not crossed their minds. In their experience, matters like education, career or freedom did not play a role in the decision-making on their first child.

6.3 Families and fertility

6.3.1 Main conclusions

A first main conclusion of this study is that the nature and quality of family and partner relationships is important for understanding fertility behaviour. To get back to the title of this dissertation, does this conclusion imply: “Happy families, high fertility”? In other words: do happy family and partner relationships encourage childbearing? This question can partly be answered positively. People who experienced little conflict between their parents and who had frequent contacts within the larger kinship network when growing up have more children and have them earlier. “Happy families” thus bring forth more children in the next generation, and these children are born earlier. And what can we conclude about “happy couples”? Our findings suggest that couples are most likely to have children when their relationship is at least “good enough”. However, lots of positive interaction or great satisfaction about one’s partner relationship do not form an extra stimulus for having (more) children. Rather, people who perceive their relationship as very good have fewer children than people in medium-quality relationships – although this appears to apply rather to women than to men. We suggest that in a very happy partner relationship, having a first or additional child might be considered as a threat to one’s happiness. The partners might be so involved with each other – or maybe with each other *and* the children they already have – that there is no room for a child or an extra child (yet). Alternatively, people who consider their relationship to be sound but not (or no longer) that exciting may want to revitalize it by having a new baby.

A second conclusion is drawn from our qualitative study: couples’ decision-making resulting in either early or postponed parenthood might generally be characterized as rather implicit, although both partners’ consent seems to be very important. Complex and explicit decision-making does occur, but disagreeing views on having children and years of postponement do not necessarily involve long-lasting explicit decision-making with a lot of partner communication. Furthermore, education, self-development or reluctance towards limitation of freedom can result in late parenthood because people deliberately postpone their first child in connection with such factors. Yet, there are also older parents who do not consciously experience the influence of such factors on the timing of their first child because they do not think of having children until they are ready for it. This shows that different processes can underlie quantitatively demonstrated relationships such as the effect of education on postponement of the first birth.

6.3.2 Contribution to the literature

On the whole, an important merit of this dissertation is that it shows that the nature of the interaction in close relationships is important for fertility decisions. This focus on social-

emotional aspects supplements the traditional focus of demographers and sociologists on “hard” determinants of fertility, such as socio-economic or demographic indicators as well as research on the effects of attitudes on fertility.

More specifically, this study contributes to the literature by testing new hypotheses. First, although ideas similar to our proposition that positive family experiences during childhood enhance desires for a family of one’s own (chapter 2) have been mentioned in one or two other studies, the effect on actual childbearing has to the best of our knowledge not been tested before. Axinn and Yabiku (2001) stated that individuals with high levels of family integration during childhood are likely to prefer earlier family formation and larger family sizes. However, they empirically applied this theoretical idea to a context that differs from ours: the context of fertility decline in a developing country.¹ In an American study, Axinn and Thornton (1996) showed that parents’ divorce leads to a more general negative attitude towards marriage and family life, among other things reducing the children’s desired number of offspring. We showed, however, that relationships in the broader family network are also relevant for the children’s actual childbearing behaviour. In addition, we showed that family relationships affect the age at which one has a first child.

Furthermore, we were among the first ones to examine the effect of partner relationship quality on fertility, and developed and partly confirmed a new hypothesis on this topic, predicting a curvilinear relationship. However, we do not consider our findings on the effects of relationship quality on fertility to support Friedman et al.’s theory (1994) that the value of children in Western societies lies in uncertainty reduction. Freedman et al. (1994) claim that because children enhance marital solidarity, thereby reducing uncertainty, divorce proneness stimulates the propensity towards parenthood. We suggested that people in reasonably good relationships may want to revitalize their relationship by having children, but our findings did not indicate that people in the lowest-quality relationships are more likely to have children than others. For this reason, we do not support the idea that people have children to reduce uncertainty about the stability of their relationship.

Our study of couples’ decision-making on having a first child expands on the sociological literature on reflexive individualization by presenting an empirical application of widely known theoretical work by Giddens (1991, 1992), Beck (1992) and Beck and Beck-Gernsheim (1995, 2002). Generally, the stories of the couples in our study are not in line with these authors’ views on decision-making by couples in modern societies. This study is also interesting for demographers, who often assume that births are preceded by deliberate decision-making. Although indeed most couples intentionally planned to have their first child, as can be expected in current Dutch society, costs and rewards are not always deliberately weighed.

¹ Axinn and Yabiku (2001) tested whether use of contraceptives among Nepalese women is affected by the degree to which childhood life (school, work, health care, leisure) was organized around non-family units.

This study also contains some methodologically innovative aspects. We made use of a diverse range of direct measures of partner relationship quality, whereas most previous studies on the topic did not measure relationship quality or stability directly, but based assumptions about the nature of the relationship only on whether or not a union disruption occurred (Koo & Janowitz, 1983; Thornton, 1978) or modelled the likelihood of a union disruption on the basis of determinants other than relationship quality (Lillard & Waite, 1993).

Furthermore, in chapter 4 we used both partners' reports of relationship quality, since partners might perceive the quality of their relationship differently. The finding that men's and women's perceptions of relationship quality together give a better explanation of the risk of having a second child than only women's or men's views is yet another indication that researchers should take into account women's as well as men's characteristics when studying fertility.

Finally, by using in-depth interviews with couples on the decision to have a first child we revealed processes and mechanisms that are often only assumed in the largely quantitative research on fertility. Interviewing both partners in a relationship, instead of only women or men, provided us with fuller accounts of the decision process and showed partners' interdependence. In the next section we will discuss the connection between our quantitative and qualitative findings in more detail.

6.3.3 Statistics and stories

In the quantitative studies of this dissertation, mechanisms behind the demonstrated associations are based on theoretical assumptions. A general assumption is that fertility behaviour is based on conscious decisions. In chapter 5 we studied the actual decision-making on the basis of interviews with couples. These interviews only revealed aspects of the decision-making that people are aware of. How do the findings of this qualitative study relate to our quantitative findings? We asked the participants about arguments and motives that played a role in their decision-making processes. We did not limit this to the role of the family of origin and of partner relationship quality – the aspects studied in the quantitative studies.² While decision-making was often quite implicit and matters like career or practicalities were not consciously considered by many couples, the importance of a good relationship for the decision to have a first child was endorsed by everyone. However, if a relationship was good, this was not an issue of much thought or reflection in the decision to have children. The different stories of the participants also showed that for some people, a good partner relationship is a condition to realize their child wish, while other respondents' desires for children emerged from a good relationship or from the partners' child wishes.

² In chapter 5 we actually paid more attention to the ways in which motives related to limitation of freedom and career played a role, since findings on these issues were more diverse and surprising.

People did not tell us that they wanted a child to revitalize their relationship, or that they waited with having children because they were afraid it would be a threat to the quality of their relationship – which we suggested as explanations for our findings in chapters 2 and 3 – although this might be a consequence of interviewing partners together and asking about the decision process in retrospect.

The role of family life during youth was also frequently mentioned as a reason to create a family. Yet, even if people do not see this as a motive, their family of origin might have influenced their decisions. These decisions are based on preferences which can be affected by childhood family experiences without one realizing it. In chapter 4 we also noted that for some people bad youth experiences were a motive to start a family and try to do better than their parents. Our quantitative finding that conflict between parents inhibits childbearing (chapter 2), however, shows that this is not a prevalent pattern.³

We can conclude that our quantitative and qualitative findings complement each other. Although the influence of family and partner relationships was not the main focus of the qualitative interviews, these interviews did confirm some of the assumptions we made in our quantitative studies: both partners appear to play an important role in the deliberate choice for having children, and people find the quality of their partner relationship very important when deciding about having children. In addition, the qualitative interviews provide details on how people experience the process of deciding whether and when to have children. We showed, for example, that this can be a shared experience, but also that the final decision can be based on two rather individual yet interdependent processes; and that some people already have clear fertility preferences when they are young, whereas others do not have ideas about having children until they are in a relationship. The interviews also revealed diverse underlying mechanisms: for instance, both good and bad childhood family experiences can form a motive for starting a family, and births among relatives and friends can evoke a strong desire to have children but also reluctance towards parenthood. Yet, the quantitative studies tell us which patterns of effect are dominant; they give us information that can be generalized to the Dutch population.

6.3.4 Societal implications

The present study sought to improve our understanding of fertility behaviour. This has a clear societal relevance, since fertility outcomes are not only of great importance to young adults themselves, but also to issues such as ageing or the combination of care and work. The determinants of fertility that were central to this study – the quality of relationships – are not the kind of determinants policymakers can or want to intervene in, but it is important to emphasize that work and care issues or financial incentives are not the only matters that are important in people's childbearing decisions.

Furthermore, the link between partner relationship quality and having children also bears relevance in the light of children's well-being, since parental conflict has

³ Note that we only interviewed couples with children, thus people who do not want children at all because of bad childhood memories were not included in our sample.

damaging effects on children (Amato et al., 1995). Therefore, it would be undesirable if a general pattern would be for couples with bad relationships to have children in the hope that this will improve their relationship. Our findings on the effects of relationship quality on childbearing do not indicate that, and can thus be considered reassuring in this respect. However, if people placed extremely high demands on their relationship before having children, this could hinder many in realizing their child wishes. Our findings seem to indicate though that for many people a good and stable relationship, but not necessarily an extraordinary good one, is a condition for having children.

Our study suggests that well-integrated families stimulate fertility. What does this imply for future birth rates? If we are to believe scholars who point to an increasing erosion of family life (Goode, 1984; Popenoe, 1993), we could expect a negative influence on birth rates. However, opponents of the family decline hypothesis highlight the importance of the broader family network (Hogan, Eggebeen, & Clogg, 1993; Bengtson, 2001; Knijn, 2004), and recent findings from the NKPS indicate that the strength of family ties in the Netherlands is still substantial (Komter & Knijn, 2006).

Finally, some scholars suggest that young people's ideal family sizes are decreasing because they get used to low numbers of children; younger cohorts are not only likely to have grown up in smaller families but were also surrounded by smaller families (Goldstein, Lutz, & Testa, 2003; Lutz, Shirbekk, & Testa, 2006). Although we do not want to deny this, we would like to emphasize that positive family experiences, even in small families, and maybe even based on contact with childless relatives, can fuel a "taste for family".

6.4 Suggestions for future research

A focus on social-emotional determinants such as the quality of relationships is relatively new in fertility research. This study showed that the quality of family and partner relationships is important for childbearing decisions, yet this topic needs more extensive investigation.

First, our conclusions on the importance of family life experiences during youth are based on information on family life in the nuclear family as well as on contact with non-residential family members, but we had a limited choice of indicators of those aspects of family relationships. Including information on the relationships of children with their parents and with their siblings, as well as information on the quality of ties with non-residential family members would supplement our research. In addition, though we are convinced that retrospective information on family life during childhood can be valuable, panel data that cover respondents' life spans from their youth to the end of their reproductive period would be ideal for this type of research. However, such data are very scarce.

Second, we did not study the role of family ties during the reproductive period, although this topic certainly deserves attention, especially within a linked lives perspective.

Whereas the quality of childhood family life is likely to influence preferences for timing and quantum of children, family relationships during the reproductive phase might not only influence preferences but also form constraints. Does the exchange of practical or financial support between family members make childbearing more likely, because (future) parents feel like they will not be on their own and count on being supported in raising their children? To what extent do fertility norms of parents or siblings influence childbearing, and does the impact of these norms depend on the nature of the ties between family members? Longitudinal datasets that have recently become available, such as the NKPS and the Gender and Generation Survey, offer good possibilities to study such issues.

Third, we had the opportunity to study the effects of relationship quality using extensive measures, yet further research on the influence of partner relationship quality on childbearing could benefit from including information on childbearing preferences from both partners, in order to shed more light on the mechanisms behind this relationship, especially on the issue of gender. The finding that only women's perceptions of relationship quality influence the likelihood of a first birth does not tell whether women's desires for children are more dependent on their perceptions of the relationship than men's desires for children, or whether women's desires for children have a greater impact on birth outcomes than men's desires.

Fourth, because relationships develop and their quality is not static, the study of the link between partner relationship quality and childbearing could be expanded by taking into account the effects of perceived changes in relationship quality on fertility (preferences).

Fifth, our findings on the effect of partner relationship quality on childbearing are based on relatively small samples. Even when using rather large datasets such as the NKPS ($N = 8,161$ at Wave 1), a researcher of life course events such as birth may end up with small samples, because some events are limited to a certain age range. Studying them might also be subject to other criteria, such as the presence of a partner, or require panel data – which results in smaller samples due to attrition. This shows the need for large panel datasets or panel data on respondents with a specific age range for the study of life course events.

Sixth, it would be interesting to examine whether couples employ different types of decision-making at different parities. Our analyses show that having a first child is often decided upon quite implicitly, without extensive weighing of expected costs and rewards. It could be that parents who decided upon having a first (and maybe a second) child quite implicitly, explicitly deliberate and discuss having a third child; this might be considered less self-evident, and rational considerations about costs might play a larger role. And maybe parents who hesitated very long on whether they wanted to have a first child have no doubts at all about further children, for example because they do not want their first-born to be an only child.

Seventh, our qualitative study also gives cause for more quantitative research. We suggested that explicit and long-lasting decision-making on whether and when to have a first child might not be as prevalent as is often suggested. Quantitative research could shed more light on the frequency of different decision-making patterns among parents (to be) in the Netherlands.

Eighth, the studies in this dissertation were either based on information reported by both partners in a couple (chapters 4 and 5) or on information from unrelated male and female respondents (chapters 2 and 3), but included tests on whether effects were different for men and women. We showed at several points that characteristics of women and men are relevant for childbearing, and moreover, that fertility processes can be different for men than for women. We therefore underline the importance of taking into account the roles of women as well as of men in fertility research.

Finally, our findings are based on data collected in the Netherlands. We are of the opinion that our theoretical ideas on the influence of childhood family life on fertility preferences bear wide validity, although these influences may be less clearly reflected in actual fertility outcomes in societies with low levels of birth control. Furthermore, in countries where marriage is the norm and divorce uncommon, considerations about relationship stability and the increase in costs of divorce that children bring about are probably not so relevant for childbearing. Still, to the extent that people in such countries do control their fertility, relationship quality might be important because they consider the well-being of future children, or because they expect having children to change their relationship. In countries where divorce rates are higher than in the Netherlands, for example in the United States, considerations about relationship stability might be of main importance. Furthermore, decision-making between partners is likely to vary by culture and depend on gender equality. Also, different economic or policy contexts might make people more or less aware of influences on their fertility decisions. Hence it would be interesting to study our research questions with data from other countries.

Samenvatting (summary in Dutch)

Het krijgen van een kind is een zeer invloedrijke gebeurtenis in de levensloop van mensen. De geboorte van een kind is immers onomkeerbaar en brengt langdurige zorg voor het kind en verbondenheid met de partner met zich mee. Tegenwoordig is in onze samenleving het krijgen van kinderen meestal gebaseerd op een keuze. Men moet kiezen *of* men kinderen wil, en zo ja, *wanneer* en *hoeveel*. In deze studie proberen we meer inzicht te krijgen zulke keuzen. Verschillende aspecten van vruchtbaarheid¹ worden onderzocht: zowel vruchtbaarheidsuitkomsten zoals de leeftijd bij geboorte van het eerste kind, de kans op een (volgend) kind, en uiteindelijk kindertal, alsook het besluitvormingsproces dat voorafgaat aan het krijgen van een kind.

Er is veel onderzoek gedaan naar de factoren die vruchtbaarheidsgedrag beïnvloeden. Meestal richten deze studies zich op individuele kenmerken, veelal die van vrouwen. Vaak wordt gekeken naar de invloed van “harde kenmerken”, zoals demografische kenmerken (bijvoorbeeld leeftijd bij trouwen), sociaal-economische kenmerken (bijvoorbeeld opleidingsniveau of inkomen), of culturele kenmerken (bijvoorbeeld etniciteit of religie). Keuzen over het krijgen van kinderen worden echter niet gemaakt door geïsoleerde individuen; levenslopen van mensen zijn immers interdependent. Dit wordt uitgedrukt in het “linked lives principe” (Elder, 1994, 1998, Elder et al., 2003). Dit principe inhoudt in dat de levensloop-opties van een individu en de keuzen die het daarin maakt, beïnvloed worden door de opvattingen en gedragingen van significante personen in zijn netwerk. We passen dit principe in deze studie toe door te onderzoeken hoe vruchtbaarheidsgedrag ingebed is in de familie van herkomst en in de partnerrelatie.

Vruchtbaarheidsstudies die zich niet beperken tot individuele determinanten van vruchtbaarheid, maar ook rekening houden met families en partners, richten zich meestal op de invloed van harde kenmerken van de ouderlijke familie of van beide partners op vruchtbaarheid. Voorbeelden zijn studies die nagaan hoe vruchtbaarheid beïnvloed wordt door het aantal broers en zussen dat iemand heeft, de sociaal-economische status van beide partners of hun verdeling van betaald en huishoudelijk werk. Over de invloed van factoren op het sociaal-emotionele terrein is vooralsnog heel weinig bekend. Dit is jammer, aangezien het aannemelijk is dat mensen zich in hun keuzen over het krijgen van kinderen ook laten beïnvloeden door de aard van hun persoonlijke relaties. Om te beginnen verwachten we dat de sociale interactie in het familienetwerk die men ervaart tijdens de jeugd, de latere opvattingen en wensen over het krijgen van kinderen beïnvloedt. Daarom is de eerste onderzoeksvraag van dit proefschrift:

- 1) *Hoe beïnvloedt de aard van relaties in de familie van herkomst vruchtbaarheidsgedrag?*

¹ De term vruchtbaarheid wordt in dit proefschrift op de demografische manier gebruikt, en verwijst naar voortbrenging van kinderen, niet naar de fysieke mogelijkheid om kinderen te kunnen verwekken en krijgen (biologische vruchtbaarheid of fecunditeit).

De wortels van kinderwensen zijn wellicht gelegen in familierelaties tijdens de jeugd; later in de levensloop staat de partnerrelatie centraal als het gaat om het krijgen van kinderen. De tweede onderzoeksvraag luidt dan ook:

2) *Hoe beïnvloedt de aard van de partnerrelatie vruchtbaarheidsgedrag?*

Niet alleen is in het bestaande onderzoek de sociale interactie tussen partners in algemeen, en daarmee de kwaliteit van hun relatie, buiten beschouwing gelaten als een determinant van vruchtbaarheidsgedrag, ook heeft de sociale interactie tussen partners in de besluitvorming over het krijgen van kinderen weinig aandacht gekregen als een op zichzelf staand onderzoeksonderwerp. In een tijd waarin de “ideologie van individualisering” benadrukt dat individuen de vrijheid en de noodzaak hebben om hun levensloop te kiezen en plannen, is het interessant om een belangrijke levensloopkeuze – het krijgen van een eerste kind – te onderzoeken vanuit het perspectief van onderlinge afhankelijkheid tussen partners. De tweede vraag wordt daarom opgesplitst in twee deelvragen:

2a) *Hoe beïnvloedt de kwaliteit van de partnerrelatie vruchtbaarheidsgedrag?*

2b) *Wat is de aard van het besluitvormingsproces van paren met betrekking tot het krijgen van een eerste kind?*

Een belangrijke aanname in deze studie is dat kinderen krijgen een keuze is, of deze keuze vooraf is gegaan door expliciete besluitvorming of niet, en of mensen zich bewust zijn van de omstandigheden die hun keuze beïnvloeden of niet. In werkelijkheid is het krijgen van kinderen natuurlijk niet altijd een keuze. Sommige mensen kunnen geen kinderen krijgen, of minder dan ze zouden willen, of de zwangerschap laat langer op zich wachten dan gewenst. Andere zwangerschappen zijn ongepland. Echter, het Onderzoeks Gezinsvorming uit 1998 laat zien dat de meeste vrouwen in Nederland die actief proberen zwanger te worden hierin slagen, en meestal op een vrij korte termijn (Steenhof & De Jong, 2000). Het gebruik van anticonceptie middelen is hoog (De Graaf, 2004) en de percentages tienerzwangerschappen en abortussen zijn relatief laag. Dit wordt over het algemeen gezien als een aanwijzing voor een laag niveau van ongewenste zwangerschappen (Coleman & Garssen, 2002). In deze studie wordt vruchtbaarheid dus onderzocht in een context van een hoge mate van gezinsplanning.

Kenmerkend voor de vruchtbaarheid in Nederland is verder dat mensen relatief laat kinderen krijgen. Nederlandse ouders behoren tot de oudste ouders ter wereld als zij hun eerste kind krijgen. Moeders zijn gemiddeld 29.4 jaar oud bij de geboorte van hun eerste kind, vaders zijn naar schatting zo'n 2.5 jaar ouder.² Het Totaal Vruchtbaarheidscijfer³ ligt sinds 2000 iets boven de 1.7 kinderen per vrouw. Gezinnen met twee kinderen zijn het populairst. Het aantal kinderen dat buiten het huwelijk wordt geboren is sterk gestegen

² Dit is gebaseerd op het leeftijdsverschil tussen nieuwe echtparen (Statistics Netherlands, 2008a) en tussen nieuwe samenwoners (Steenhof & Harmsen, 2002) in 2000. Er zijn in Nederland geen statistieken van de gemiddelde leeftijd van mannen bij de geboorte van hun eerste kind.

³ Het gemiddeld aantal kinderen dat een vrouw zou krijgen indien gedurende haar reproductieve periode de in het betreffende jaar waargenomen leeftijdsspecifieke vruchtbaarheidscijfers zouden blijven gelden (Eurostat, 2008).

de afgelopen decennia. In 1970 werd 2% van alle kinderen buiten het huwelijk geboren, in 2007 was dat 40%. Van alle eerstgeborenen dat jaar had 50% ongetrouwde ouders (Statistics Netherlands, 2008b). Deze buitenechtelijke vruchtbaarheid betreft voor het overgrote deel kinderen van samenwonende ouders (Coleman & Garssen, 2002).

Data

Dit onderzoek is gebaseerd op data van de Netherlands Kinship Panel Study (NKPS; Dykstra et al., 2005, 2007) en de Panel Studie Sociale Integratie in Nederland (PSIN; Liefbroer & Kalmijn, 1997). Beide onderzoeken hebben een panel karakter. Dit houdt in dat dezelfde respondenten op meerdere momenten ondervraagd worden, zodoende worden zij gedurende een bepaalde periode van hun levensloop gevolgd. De NKPS is een grootschalig enquête over familierelaties in Nederland. De respondenten zijn tot dusver twee keer ondervraagd. In de eerste enquêteronde, die plaatsvond in 2002 en 2003, werden 8161 mensen tussen de 17 en 79 geïnterviewd. Daarnaast is een selectie van personen uit het familienetwerk van elk van deze hoofdrespondent ondervraagd. In dit proefschrift maken we gebruik van informatie gerapporteerd door de hoofdrespondent en hun partners. De tweede ronde vond plaats in 2006 en 2007.

De PSIN is ontworpen om het proces van sociale integratie van jongvolwassenen te bestuderen op het gebied van relatie- en gezinsvorming, opleiding en werk. Een steekproef van Nederlandse jongvolwassenen geboren in 1961, 1965 en 1969 is in zes dataverzamelingsronden (1987–2006) ondervraagd. In de eerste ronde werden 1775 interviews afgenomen. In ons onderzoek maken we gebruik van de eerste (1987), derde (1991) en vierde (1995) ronde.

Het panel karakter van deze twee grote datasets biedt de mogelijkheid om op prospectieve wijze de invloed van de kwaliteit van partnerrelaties op het krijgen van kinderen te onderzoeken, dat wil zeggen dat wordt gekeken naar het al dan niet plaatsvinden van geboorten in de jaren na de meting van relatiekwaliteit. Daarnaast biedt de NKPS de mogelijkheid om retrospectief de invloed van de familie van herkomst op vruchtbaarheid te onderzoeken, omdat de respondenten is gevraagd naar kenmerken van hun de familie tijdens hun jeugd.

De kwantitatieve data van de NKPS zijn aangevuld met kwalitatieve data door middel van kleinschalige dieptestudies; de zogenaamde minipanelen. In dit kader zijn voor dit proefschrift 33 diepte-interviews gehouden met paren die zijn geselecteerd uit de eerste ronde van de NKPS op hun leeftijd bij de geboorte van hun eerste kind. De helft van deze paren kreeg hun eerste kind op jonge leeftijd, de andere helft relatief laat. Zij werden ondervraagd over het besluitvormingsproces dat voorafging aan de geboorte van hun eerste kind aan de hand van een paar-interactie-interview: een semi-gestructureerd, face-to-face interview met beide partners tegelijk.

De invloed van relaties in de familie van herkomst op vruchtbaarheid

In hoofdstuk 2 beantwoorden we onderzoeksvraag 1. Bestaande literatuur over de invloed van de ouderlijke familie op gezinsvorming richt zich vooral op directe overdracht van demografische gedragingen van ouders op hun kinderen, of op de invloed van de sociale status van de ouderlijke familie op demografisch gedrag van de kinderen. Wij beargumenteren dat kinderwensen daarnaast geworteld kunnen zijn in ervaringen met familieleven tijdens de jeugd. Positieve ervaringen zouden tot een “taste for family” kunnen leiden. Daarom bestuderen we in hoofdstuk 2 de invloed van de familie van herkomst op het krijgen van kinderen en richten ons daarbij niet alleen op directe intergenerationele overdracht van vruchtbaarheidsgedrag en de invloed van de sociale status van de ouderlijke familie, maar ook op de invloed van de aard van de familierelaties tijdens de jeugd. We maken gebruik van de eerste ronde van de NKPS (2002-2003) en onderzoeken twee aspecten van vruchtbaarheid: de leeftijd bij de geboorte van het eerste kind en het totaal aantal kinderen dat men heeft gekregen als men de leeftijd van 40 (vrouwen) of 45 (mannen) bereikt heeft.

In overeenstemming met bevindingen van eerdere studies naar de intergenerationele overdracht van timing van geboorten (Manlove, 1997; Barber, 2000; Steenhof & Liefbroer, 2008), vinden we dat hoe jonger de ouders waren bij de geboorte van hun eerste kind, hoe jonger hun kinderen zijn bij de geboorte van hun eerste kind. De meeste eerdere studies onderzochten alleen de overdracht van geboorte timing van moeders op hun kinderen, en vonden dat de overdracht van moeders op dochters wat sterker is dan die van moeders op zonen (Furstenberg et al., 1990; Horwitz et al, 1991; Barber, 2001). Wij onderzochten echter niet alleen het effect van de leeftijd van de moeder, maar ook de leeftijd van de vader bij de geboorte van het eerste kind. De resultaten laten zien dat de leeftijd van dochters bij het krijgen van hun eerste kind door beide ouders wordt beïnvloed, terwijl de leeftijd van zonen bij het krijgen van hun eerste kind alleen beïnvloed wordt door hun vader – dat wil zeggen, het effect van moeders leeftijd bij de geboorte van haar eerste kind op de leeftijd van haar zoon bij de geboorte van zijn eerste kind verdwijnt als ook de leeftijd van de vader bij de eerste geboorte wordt opgenomen in de analyse. Verder tonen onze analyses aan dat hoe meer broers en zussen iemand heeft, des te meer kinderen hij of zij krijgt. Dit bevestigt de bevindingen van eerdere studies naar intergenerationele overdracht van kindertallen (Pearson & Lee, 1899; Berent, 1953; Duncan et al., 1965; Johnson & Stokes, 1976; Zimmer & Fulton, 1980; Anderton et al., 1987; Murphy & Wang, 2001).

Daarnaast vinden we dat een aantal indicatoren van de sociale status van de ouderlijke familie zowel de leeftijd bij geboorte van het eerste kind als het totaal aantal kinderen beïnvloedt. Hoe hoger het opleidingsniveau van de vader en van de moeder, en hoe hoger de beroepsstatus van de vader, hoe meer hun kinderen de geboorte van het eerste kind uitstellen. Het opleidingsniveau van de moeder heeft daarnaast een negatieve invloed op het aantal kinderen; hoe hoger haar opleiding, hoe minder kinderen haar kinderen krijgen. Als ook het opleidingsniveau van het (volwassen) kind in de analyses

wordt opgenomen, blijven de effecten van het opleidingsniveau van de moeder op beide onderzochte aspecten van de vruchtbaarheid van het kind bestaan. Deze effecten zijn grotendeels onafhankelijk van het opleidingsniveau van het kind; ze worden dus maar voor een klein deel veroorzaakt door overdracht van opleidingsniveau van moeder op kind. Mensen die opgroeien met religieuze ouders krijgen meer kinderen dan de kinderen van niet religieuze ouders.

Centraal voor het beantwoorden van de eerste onderzoeksvraag zijn onze bevindingen dat naast de besproken demografische en sociaal-economische kenmerken van het gezin van herkomst, ook de aard van familierelaties tijdens de jeugd een invloed heeft op het latere vruchtbaarheidsgedrag. Conflictgedrag tussen ouders leidt bij hun kinderen tot uitstel van de eerste geboorte en een lager kindertal. Jeugdervaringen in het bredere familienetwerk zijn alleen van belang voor de timing van het eerste kind; kinderen uit families waar veel bij elkaar gelogeerd werd, krijgen hun eerste kind op jongere leeftijd. Al met al ondersteunen deze bevindingen onze hypothese dat positieve ervaringen met familieleden tijdens de jeugd het krijgen van kinderen stimuleert. Een alternatieve hypothese, die veronderstelt dat positieve familie-ervaringen tijdens de jeugd leiden tot een sterkere overdracht van vruchtbaarheidsgedrag van ouders op kinderen, is niet bevestigd. Ten slotte worden mannen en vrouwen blijkens ons onderzoek op gelijke wijze beïnvloed door de aard van de familierelaties tijdens hun jeugd.

De invloed van de kwaliteit van de partnerrelatie op vruchtbaarheid

Terwijl de gevolgen van het krijgen van kinderen voor de kwaliteit en stabiliteit van partnerrelaties uitgebreid zijn onderzocht (Cherlin, 1977; Glenn, 1989; Waite & Lillard, 1991; Kurdek, 1999; Helms-Erickson, 2001), is er nauwelijks onderzoek naar de tegenovergestelde invloed van relatiekwaliteit op vruchtbaarheid. In hoofdstuk 3 gaan we in op onderzoeksvraag 2a, waarbij we gebruik maken van data van drie ronden van de PSIN. We onderzoeken de effecten van verschillende dimensies van relatiekwaliteit: positieve partnerinteractie, negatieve partnerinteractie, waardeconsensus, en het overwegen van een relatiebreuk (of scheiding). Daarbij corrigeren we voor de effecten van de duur van de partnerrelatie en de status (samenwonend of gehuwd), en van de sociale en economische achtergrondkenmerken van beide partners. De analyses tonen aan dat zowel positieve als negatieve interactie tussen partners de kans op het krijgen van een eerste of een volgend kind vermindert. Deze bevinding laat zien dat het verband tussen relatiekwaliteit en vruchtbaarheid complexer is dan we hadden verondersteld. We gingen op basis van de literatuur uit van twee tegenovergestelde hypothesen. Enerzijds kon verwacht worden dat relatiekwaliteit een positieve invloed op vruchtbaarheid zou hebben (hoe beter de relatie, hoe groter de kans op kinderen), omdat een goede relatie de beste omgeving vormt om een kind op te voeden (Myers, 1997) en omdat een eventuele scheiding meer nadelen met zich meebrengt als er kinderen in het spel zijn (Lillard & Waite, 1993). Anderzijds kon een negatieve invloed verwacht worden (hoe slechter de relatie, hoe groter de kans op kinderen) omdat mensen in een slechte relatie het krijgen

van een kind zouden kunnen zien als een middel om de relatie te bestendigen (Friedman et al., 1994). Onze bevindingen wijzen niet eenduidig in de richting van één van deze hypothesen. Ze suggereren dat paren de grootste kans hebben om (nog) een kind te krijgen, wanneer er niet te veel negatieve interactie is – dat wil zeggen; wanneer hun relatie goed genoeg is – maar wanneer er ook niet te veel positieve interactie is. Paren met heel veel positieve interactie zouden het krijgen van (nog) een kind kunnen zien als een bedreiging voor hun geluk, terwijl paren met weinig positieve interactie wellicht een kind willen hun relatie nieuw leven in te blazen. We vinden geen effect van het overwegen van een relatiebreuk op vruchtbaarheid, maar willen niet te snel concluderen dat er daadwerkelijk geen effect is, aangezien we voor de meting van het overwegen van een relatiebreuk slechts één item ter beschikking hadden.

In hoofdstuk 4 wordt de invloed van de kwaliteit van partnerrelaties op het krijgen van kinderen verder onderzocht. Hierbij maken we gebruik van data van de NKPS. Zodoende kunnen we het verband tussen relatiekwaliteit en vruchtbaarheid onderzoeken met een andere steekproef dan in hoofdstuk 3 en kunnen we relatiekwaliteit meten aan de hand van andere dimensies. Bovendien is in de NKPS de relatiekwaliteit niet alleen door de hoofdrespondenten, maar ook door hun partners gerapporteerd. Dit stelt ons in de gelegenheid te onderzoeken wat er gebeurt als de percepties van partners van de kwaliteit van hun relatie niet overeenkomen. Relatiekwaliteit is geoperationaliseerd aan de hand van items over de steun, conflict en de kwaliteit van de relatie in het algemeen. Deze items vormen één schaal.

Op basis van onze bevindingen in hoofdstuk 3, formuleren we een nieuwe hypothese over het verband tussen de kwaliteit van partnerrelaties en vruchtbaarheid, namelijk dat paren met een midden-niveau van relatiekwaliteit⁴ de grootste kans hebben een kind te krijgen. Ook in deze analyses corrigeren we voor achtergrondkenmerken van het paar. Overeenkomstig deze hypothese, laten onze analyses zien dat de perceptie die vrouwen hebben van hun relatiekwaliteit een non-monotone invloed heeft op zowel de kans om een eerste als de kans om een tweede kind te krijgen; vrouwen met een midden-score op relatiekwaliteit hebben de grootste kans om (nog) een kind te krijgen, terwijl vrouwen die de hoogste relatiekwaliteit rapporteren, een kans hebben die in ligt tussen de kans van vrouwen in de lage categorie en die in de midden-categorie. De perceptie die mannen hebben van hun relatiekwaliteit blijkt geen invloed te hebben op de geboorte van eerste kinderen, maar wel op die van tweede kinderen. Het effect is – anders dan bij vrouwen – positief, hoewel niet lineair; mannen die relatiekwaliteit van een midden- of hoog niveau rapporteren hebben meer kans een tweede kind te krijgen dan mannen met een lage relatiekwaliteit, maar er is geen statistisch significant verschil in de kans op een kind tussen de mannen met midden- en hoge scores op relatiekwaliteit.

⁴ We hebben de scores van de respondenten op relatiekwaliteit gehercodeerd in laag, midden, en hoog. Elke categorie bevat een derde van de respondenten.

De percepties die elk van beide partners hebben van de kwaliteit van hun relatie beïnvloeden vruchtbaarheid onafhankelijk van elkaar; we vinden geen unieke effecten van discrepanties tussen partner in gerapporteerde relatiekwaliteit. Onze resultaten bieden derhalve geen ondersteuning voor de hypothese die, uitgaande van een veto-principe, veronderstelt dat het krijgen van kinderen tegengehouden wordt als één van de partners de relatiekwaliteit als ongunstig voor het krijgen van kinderen beoordeelt, ongeacht wat de andere partner van de relatiekwaliteit vindt.

De besluitvorming van paren over het eerste kind

In hoofdstuk 5 staat onderzoeksvraag 2b over de besluitvorming van ouders met betrekking het krijgen van een eerste kind centraal. Het bestaande vruchtbaarheidsonderzoek is grotendeels kwantitatief en richt zich voornamelijk op determinanten en uitkomsten, maar niet op het besluitvormingsproces zelf. Om te onderzoeken *hoe* mensen besluiten over het krijgen van kinderen – in hoeverre ze er bewust over nadenken, of ze kosten en baten afwegen, welk dilemma's ze ervaren, en of en hoe ze erover communiceren met hun partner – is kwalitatief onderzoek erg geschikt.

Op basis van 33 semi-gestructureerde diepte interviews, vergelijken we ouderparen die hun eerste kind op relatief jonge leeftijd kregen (de vrouw 25 jaar of jonger, de man meestal wat ouder) met ouders die hun eerste kind op relatief hoge leeftijd kregen (de vrouw 33 jaar of ouder, de man meestal wat ouder).

De theoretische achtergrond wordt gevormd door theorieën over individualisering en levensstijl-keuzen (Giddens, 1991, 1992; Beck, 1992; Beck & Beck-Gernsheim, 1995, 2005). Deze theorieën benadrukken het belang van het maken van keuzen in de huidige samenleving en veronderstellen dat door verdergaande individualisering en afname van vanzelfsprekendheid van traditionele genderrollen, partners steeds meer met elkaar communiceren of zelfs onderhandelen. Tegen deze theoretische achtergrond is de meest opvallende bevinding dat het besluitvormingsproces met betrekking tot het krijgen van het eerste kind bij de paren in onze studie over het algemeen vrij impliciet was. De meeste geboorten waren weliswaar gepland, en gebaseerd op instemming van beide partners, maar er was meestal geen sprake van langdurig nadenken, uitgebreide gesprekken of lange termijn planning. Dit was niet alleen vaak het geval bij de paren die hun eerste kind jong kregen, maar tegen onze verwachting in, ook bij de paren die hun kind relatief laat kregen. De besluitvorming bestond vaak uit twee stappen; vroeg in de relatie besloten de paren dat ze kinderen willen, en in een later stadium van de relatie werd bepaald wanneer ze hun eerste kind wilden. Deze tweedeling in het besluitvormingsproces kwam vaker voor bij oudere ouders dan bij jonge ouders. Oudere ouders hebben zich dus vaker vroeg in hun relatie expliciet verzekerd de kinderwens van hun partner dan jonge ouders, maar dit ging vrijwel nooit gepaard met uitgebreide communicatie noch met het plannen van een tijdspad. Onze interviews laten ook zien dat individuele twijfels en conflicterende kinderwensen onder partners niet noodzakelijk tot discussie tussen partners leiden; een alternatief patroon is dat de ene partner in stilte wacht tot de andere partner zich over zijn of haar twijfels heeft heen gezet.

Karakteristiek voor jonge ouders was dat ze zich tijdens het besluitvormingsproces over het krijgen van kinderen niet druk maakten over het verlies van hun vrijheid. Hetzij omdat ze niet anticipeerden op grote aanpassingen in hun levensstijl na de komst van een kind, hetzij omdat ze het niet erg vonden om meer gebonden te zijn zodra het kind er zou zijn. Sommige oudere ouders stelden het ouderschap bewust uit omdat ze dilemma's op het gebied van werk en zorg verwachtten, of omdat ze opzagen tegen de verantwoordelijkheden en de inperking van hun vrijheid. Andere oudere ouders daarentegen hadden juist niet zulke gevoelens ervaren, omdat ze pas over kinderen begonnen na te denken toen ze er aan toe waren om wat vrijheid op te geven. In de periode daarvoor, toen ze studeerden, uitgingen, reisden en/of carrière maakten, kwam het idee om kinderen te krijgen gewoonweg niet bij hen op. Volgens hun eigen ervaring speelden zaken zoals carrière of vrijheid dus geen rol in de timing van hun eerste kind.

Conclusies

Wat leert deze studie ons nu over vruchtbaarheid? Om te beginnen kunnen we concluderen dat de aard en de kwaliteit van familie- en partnerrelaties belangrijk zijn voor het begrijpen van keuzen over het krijgen van kinderen. Om terug te komen op de titel van dit proefschrift ("Happy families, high fertility?"); bevorderen goede familie- en partnerrelaties het krijgen van kinderen? Gedeeltelijk kunnen we deze vraag positief beantwoorden. Mensen die in hun jeugd weinig conflicten tussen hun ouders meemaakten en die regelmatig contacten met hun familieleden hadden, krijgen meer kinderen, en ze krijgen deze op jongere leeftijd. En wat kunnen we concluderen met betrekking tot gelukkige paren? Onze bevindingen suggereren dat paren de grootste kans hebben om kinderen te krijgen als hun relatie goed genoeg is. Veel positieve partnerinteractie of een hoge mate van tevredenheid over de relatie vormen echter geen extra stimulans om (meer) kinderen te krijgen. Mensen die de kwaliteit van hun relatie heel hoog vinden krijgen minder kinderen dan mensen in relaties van een midden-niveau, hoewel dit gezien de resultaten van hoofdstuk 4 misschien meer opgaat voor vrouwen dan voor mannen. Als verklaring suggereren we dat in heel gelukkige partnerrelaties, het krijgen van (nog) een kind gezien kan worden als een bedreiging van het geluk. De partners zijn misschien zo op elkaar betrokken, of op elkaar en de kinderen die ze al hebben, dat er (nog) geen ruimte is voor een (extra) kind. Mensen die hun relatie gezond vinden, maar niet fantastisch, willen hun relatie misschien revitaliseren door een kind te krijgen.

Verdere conclusies van dit proefschrift zijn gebaseerd op de bevindingen van onze kwalitatieve studie. Deze suggereren ten eerste dat besluitvorming van paren die resulteert in vroeg of juist in laat ouderschap over het algemeen vrij impliciet is, hoewel de instemming van beide partners erg belangrijk is. Opvallend is dat jarenlang uitstel van het eerste kind, en zelfs conflicterende standpunten over het krijgen van kinderen niet noodzakelijkerwijs gepaard gaan met langdurige overwegingen of veel discussie tussen partners. Op basis van deze studie kunnen we geen generaliseerbare uitspraak doen over de frequentie van impliciete en expliciete besluitvorming onder Nederlandse

ouders (in sp ). Desalniettemin denken we dat onze bevindingen aandacht verdienen, als een tegengeluid te midden van alle nadruk die zowel door wetenschappers als in de media gelegd wordt op de complexiteit van de keuze voor kinderen en de dilemma's die daarmee gepaard kunnen gaan (Gerson, 1985; Van Luijn, 1994; Raad voor de Volksgezondheid en Zorg, 2007).

Ten tweede laten onze kwalitatieve analyses zien dat verschillende achterliggende mechanismen ten grondslag kunnen liggen aan verbanden die met kwantitatief onderzoek aangetoond zijn, zoals bijvoorbeeld het verband tussen opleiding en uitstel van kinderen krijgen. Zo kunnen opleiding, carrière of de wens te genieten van vrijheid resulteren in laat ouderschap omdat mensen *heel bewust* het krijgen van hun eerste kind uitstellen vanwege dit soort factoren. Er is echter ook een groep oudere ouders die *niet bewust* de invloed dit soort factoren op de timing van hun eerste kind ervaren, omdat zij helemaal niet nadenken over het krijgen van kinderen tot zij het gevoel hebben genoeg gezien en gedaan te hebben en aan kinderen toe te zijn. Een bewuste afweging van kosten en baten, die vaak verondersteld wordt in de sociologische en demografische literatuur, wordt lang niet altijd gemaakt.

Dit proefschrift draagt op verschillende manieren bij aan de literatuur over vruchtbaarheid. De focus op sociaal-emotionele invloeden vormt een aanvulling op de traditionele focus van demografen en sociologen op de harde determinanten van vruchtbaarheid, en op onderzoek naar effecten van attitudes op vruchtbaarheid. Meer specifiek draagt dit onderzoek bij aan de literatuur door nieuwe hypotheses te toetsen en door enkele methodologische innovaties. De hypothese dat positieve familie-ervaringen tijdens de jeugd het krijgen van kinderen stimuleert is voor zover we weten niet eerder getoetst. Daarnaast is onze studie   n van de eerste die het effect van de kwaliteit van partnerrelaties op vruchtbaarheid onderzoeken. We ontwikkelden een nieuwe hypothese, die voorspelt dat paren met midden-niveau van relatiekwaliteit de grootste kans hebben om kinderen te krijgen, en maakten bij de toetsing daarvan gebruik van directe metingen van relatiekwaliteit, in   n van de deelstudies gerapporteerd door beide partners. Eerdere studies op dit gebied gebruikten statistische schattingen van de kans op scheiding. Ook in kwalitatieve onderzoek naar de besluitvorming over het krijgen van kinderen is het feit dat wij beide partners hebben ge nterviewd vernieuwend. Deze deelstudie is een empirische toepassing van welbekend theoretisch werk van Giddens (1991, 1992) Beck (1992) en Beck en Beck-Gernsheim (1995, 2005). Over het algemeen komen de verhalen van de paren in onze studie niet overeen met de idee n van deze auteurs over besluitvorming door paren in moderne samenlevingen.

References

- Allan, G. (1980). A note on interviewing spouses together. *Journal of Marriage and the Family*, 42, 205–210.
- Amato, P. R. (1991). Psychological distress and recall of childhood family characteristics. *Journal of Marriage and the Family*, 53, 1011–1019.
- Amato, P. R. (1996). *Explaining the intergenerational transmission of divorce*. *Journal of Marriage and the Family*, 58, 628–640.
- Amato, P. R., Johnson, D. R., Booth, A., & Rogers, S. J. (2003). Continuity and change in marital quality between 1980 and 2000. *Journal of Marriage and Family*, 65, 1–22.
- 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., & A. Booth (1995). Parental divorce, marital conflict, and offspring well-being during early adulthood. *Social Forces*, 73, 895–915.
- Andersson, G., & Scott, K. (2007). Childbearing dynamics of couples in a universalistic welfare state: The role of labor-market status, country of origin, and gender. *Demographic Research*, 17, 897–938.
- Anderton, D. L., Tsuya, N. O., Bean, L. L., & Mineau, G. P. (1987). Intergenerational transmission of relative fertility and life course pattern. *Demography*, 24, 467–480.
- Ariès, P. (1980). Two successive motivations for the declining birth rate in the West. *Population and Development Review*, 6, 645–650.
- Ariès, P. (1993). *Centuries of childhood*. Harmondsworth, UK: Penguin Books.
- Axinn, W. G., Clarkberg, M. E., & Thornton, A. (1994). Family influences on family size preferences. *Demography*, 31, 65–79.
- Axinn, W. G., & Thornton, A. (1996). The influence of parents' marital dissolutions on children's attitudes toward family formation. *Demography*, 33, 66–81.
- Axinn, W. G., & Yakibu, S. T. (2001). Social change, the social organization of families, and fertility limitation. *American Journal of Sociology*, 106, 1219–1261.
- Bagley, C. (1973). *The Dutch plural society: A comparative study in race relations*. London: Oxford University Press for the Institute of Race Relations.
- Baizán, P., Aassve, A., & Billari, F. C. (2003). Cohabitation, marriage, and first birth: The interrelationship of family formation events in Spain. *European Journal of Population*, 19, 147–169.
- Baizán, P., Aassve, A., & Billari, F. C. (2004). The interrelations between cohabitation, marriage and first birth in Germany and Sweden. *Population and Environment*, 25, 531–561.
- Barber, J. S. (2000). Intergenerational influences on the entry into parenthood: Mothers' preferences for family and non-family behavior. *Social Forces*, 79, 319–348.
- Barber, J. S. (2001). The intergenerational transmission of age at first birth among married and unmarried men and women. *Social Science Research*, 30, 219–247.

- Beach, L. R., Hope, A., Townes, B. D., & Campbell, F. L. (1982). The expectation-threshold model of reproductive decision making. *Population and Environment*, 5, 95–108.
- Beck, U. (1992). *Risk society: Towards a new modernity*. London: Sage.
- Beck, U., & Beck-Gernsheim, E. (1995). *The normal chaos of love*. Cambridge, UK: Polity Press.
- Beck, U., & Beck-Gernsheim, E. (2002). *Individualization: Institutionalized individualism and its social and political consequences*. London: Sage.
- Becker, G. S. (1991). *A treatise on the family*. (Rev. ed.). Cambridge, MA: Harvard University Press.
- Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy*, 85, 1141–1187.
- Behrman, J. R., & Taubman, P. (1989). A test of the Easterlin fertility model using income for two generations and a comparison with the Becker model. *Demography*, 26, 117–123.
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, 63, 1–16.
- Berent, J. (1953). Relationship between family sizes of the successive generations. *Milbank Memorial Fund Quarterly Bulletin*, 31, 39–50.
- Bernard, J. (1972). *The future of marriage*. New York: World.
- Bernardi, L. (2003). Channels of social influence on reproduction. *Population Research and Policy Review*, 22, 527–555.
- Blood, R. O., & Wolfe, D.M. (1960). *Husbands and wives: The dynamics of married living*. Glencoe, IL: Free Press.
- Blossfeld H. P. (Ed.). (1995). *The new role of women: Family formation in modern societies*. Boulder, CO: Westview.
- Boeije, H. R. (2004). And then there were three: Self-presentational styles and the presence of the partner as a third person in the interview. *Field Methods*, 16, 3–22.
- Bongaarts, J., & Watkins, S. C. (1996). Social interactions and contemporary fertility transitions. *Population and Development Review*, 22, 639–682.
- Bonneux, L., Zaadstra, B. M., & De Beer, J. A. A. (2008). Verstandige gezinsplanning: Niet te laat, maar ook niet te vroeg kinderen krijgen [Sensible family planning: having children not too late, but not too early either]. *Nederlands Tijdschrift voor Geneeskunde*, 152, 1507–1512.
- Bulatao, R. A. (1981). Values and disvalues of children in successive childbearing decisions. *Demography*, 18, 1–25.
- Bumpass, L. L., & Westoff, C. F. (1970). *The later years of childbearing*. Princeton, NJ: Princeton University Press.
- Buunk, B., & Nijskens, J. (1980). Communicatie en satisfactie in intieme relaties [Communication and satisfaction in intimate relationships]. *Gedrag*, 4, 240–260.

- Callan, V. J. (1985). Comparisons of mothers of one child by choice with mothers wanting a second birth. *Journal of Marriage and the Family*, 47, 155–164.
- 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.
- Carlson, M. J. (2007). *Trajectories of couple relationship quality after childbirth: Does marriage matter?* (Working paper No. 897). Princeton University, NJ, Woodrow Wilson School of Public and International Affairs, Center for Research on Child Wellbeing.
- Carmichael, G. A., & Whittaker, A. (2007). Choice and circumstance: Qualitative insights into contemporary childlessness in Australia. *European Journal of Population*, 23, 111–143.
- Cherlin, A. (1977). The effect of children on marital dissolution. *Demography*, 14, 265–272.
- Cohen, S. B., & Sweet, J. A. (1974). The impact of marital disruption and remarriage on fertility. *Journal of Marriage and the Family*, 36, 87–96.
- Coleman D., & Garssen J. (2002). The Netherlands: Paradigm or exception in Western Europe's demography? *Demographic Research*, 7, 433–468.
- Coombs, L. C., & Chang, M. (1981). Do husbands and wives agree? Fertility attitudes and later behavior. *Population and Environment*, 4, 109–127.
- Cooper, P. E., Cumber, B., & Hartner, R. (1978). Decision-making patterns and post decision adjustment of childfree husbands and wives. *Journal of Family and Economic Issues*, 1, 71–94.
- 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, 117–126.
- Cunningham, M., & Thornton, A. (2006). The influence of parents' marital quality on adult children's attitudes toward marriage and its alternatives: Main and moderating effects. *Demography*, 43, 659–672.
- Davidson, A. R., & Beach, L. R. (1981). Error patterns in the prediction of fertility behaviours. *Journal of Applied Social Psychology*, 11, 475–488.
- De Graaf, A. (2004). Geboorteregeling in 2003. *Bevolkingstrends*, 52(1), 23–27.
- De Jong, A. & Broekman, R. (2001). Laat getrouwd, snel een kind. *Maandstatistiek van de Bevolking*, 49(7), 7–9.
- De Leeuw, E. D., & De Heer, W. (2001). Trends in household survey nonresponse: A longitudinal, 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.
- De Swaan, A. (1981). The politics of agoraphobia. *Theory and Society*, 10, 359–85.
- Den Bandt, M.-L. (1982). *Vrijwillig kinderloze vrouwen: Verkenningen rond een keuze* [Voluntary childless women: Explorations of a choice]. Deventer, the Netherlands: Van Loghum Slaterus.

- 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.
- Dykstra, P. A., & Komter, A. E. (2006). The Netherlands Kinship Panel Study: An introduction. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder (Eds.), *Family solidarity in the Netherlands* (pp. 11–20). Amsterdam: Dutch University Press.
- Easterlin, R. A. (1969). Towards a socioeconomic theory of fertility: A survey of recent research on economic factors in American fertility. In S. J. Behrman, L. Corsa, Jr., & R. Freedman (Eds.), *Fertility and family planning: A World View* (pp. 127–156). Ann Arbor: University of Michigan Press.
- Easterlin, R. A., Pollak, R. A., & Wachter, M. L. (1980). Towards a more general economic model of fertility determination: Endogenous preferences and natural fertility. In R. A. Easterlin (Ed.), *Population and economic change in developing countries* (pp. 81–140). Chicago: The University of Chicago Press.
- Edwards, M. E. (2002). Education and occupations: Reexamining the conventional wisdom about later first births among American mothers. *Sociological Forum*, 17, 423–443.
- Elder, G. H., Jr. (1985). Perspectives on the life course. In G. H. Elder, Jr. (Ed.), *Life course dynamics: Trajectories and transitions, 1968–1980* (pp. 23–49). Ithaca, NY: Cornell University Press.
- Elder, G. H., Jr. (1992). Life course. In E. Borgatta, & M. Borgatta (Eds.), *Encyclopedia of Sociology* (Vol. 3, pp. 1120–1130). New York: Macmillan.
- Elder, G. H., Jr. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly*, 57, 4–15.
- Elder, G. H., Jr, Johnson, M. K., & Crosnoe R. (2003). The emergence and development of life course theory. In J. T. Mortimer, & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3–19). New York: Kluwer Academic/Plenum.

- Engelen, T. L. M., & Hillebrand, J. H. A. (1986). Fertility and nuptiality in the Netherlands, 1850–1960. *Population Studies*, 40, 487–503.
- Engelhardt, H. (2004). *Fertility intentions and preferences: Effects of structural and financial incentives and constraints in Austria* (Working Paper No. 2). Vienna Institute of Demography, Austria.
- 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
- Eurostat. (2002). *The life of women and men in Europe: A statistical portrait*. Luxembourg, Luxembourg: Office for Official Publications of the European Communities.
- Eurostat. (2008). *Europe in figures: Eurostat yearbook 2008*. Luxembourg, Luxembourg: Office for Official Publications of the European Communities.
- Evertsson, L., & Nyman, C. (2008). Myten om den förhandlande familjen [The myth of the negotiating family]. In A. Grönlund & B. Halleröd (Eds.), *Jämställdhetens pris* (pp. 45–81). Umeå, Sweden: Boréa Bokförlag.
- Fawcett, J. T. (1988). The value of children and the transition to parenthood. *Marriage and Family Review*, 12, 11–34.
- Fischer, T. (2004). *Parental divorce, conflict, and resources*. Doctoral dissertation (ICS dissertation series No. 105), University of Nijmegen, Nijmegen, the Netherlands.
- Fokkema, T., De Valk, H., De Beer, J., & Van Duin, C. (2008). The Netherlands: Childbearing within the context of a “Poldermodel” society. *Demographic Research*, 19, 743–783.
- Freedman, D., Thornton, A., Camburn, D., Alwin, D., & Young-DeMarco, L. (1988). The life history calendar: A technique for collecting retrospective data. *Social Methodology*, 18, 37–68.
- 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). *Divided Families: What happens to children when parents part?* Cambridge, MA: Harvard University Press.
- Furstenberg, F. F. Jr., Levine J. A., & Brooks-Gunn J. (1990). The children of teenage mothers: Patterns of early childbearing in two generations. *Family Planning Perspectives*, 22, 54–61.
- Ganzeboom, H. B. G., De Graaf, P. M., & Treiman, D. J. (1992). A standard international socioeconomic index of occupational status. *Social Science Research*, 21, 1–56.
- Garssen, J. (2004). Tienermoeders: Recente trends en mogelijke verklaringen [Teenage mothers: Recent trends and possible explanations]. *Bevolkingstrends*, 52(1), 13–22.
- Gerson, K. (1985). *Hard choices: How women decide about work, career, and motherhood*. Berkely: University of California Press.
- Giddens, A. (1991). *Modernity and self-identity. Self and society in the late modern age*. Cambridge, UK: Polity Press.

- Giddens, A. (1992). *The transformation of intimacy: Sexuality, love & eroticism in modern societies*. Cambridge, UK: Polity Press.
- Glenn, N. D. (1989). Duration of marriage, family composition and marital happiness. *National Journal of Sociology*, 3, 3–24.
- Glenn, N. D. (1990). Quantitative research on marital quality in the 1980s: A critical review. *Journal of Marriage and the Family*, 52, 818–831.
- 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.
- Goldstein, J., Lutz, W., & Testa, M. (2003). The emergence of sub-replacement family size ideals in Europe. *Population Research and Policy Review*, 22, 479–496.
- Goode, W. J. (1984). Individual investments in family relationships over the coming decades. *The Tocqueville Review*, 6, 51–83.
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin*, 108, 267–290.
- Heaton, T. B., Jacobson, C. K., & Holland, K. (1999). Persistence and change in decisions to remain childless. *Journal of Marriage and the Family*, 61, 531–539.
- Helms-Erickson, H. (2001). Marital quality ten years after the transition to parenthood: Implications of the timing of parenthood and the division of housework. *Journal of Marriage and Family*, 63, 1099–1110.
- Hendershot, G. E. (1969). Familial satisfaction, birth order, and fertility values. *Journal of Marriage and the Family*, 31, 27–33.
- Hertz, R. (1995). Separate but simultaneous interviewing of husbands and wives: Making sense of their stories. *Qualitative Inquiry*, 1, 429–451.
- Hobcraft, J., & Kiernan, K. (1995). Becoming a parent in Europe. In *EAPS/IUSSP European Population Conference Proceedings*, Milan, Italy. Milan: Franco Angeli.
- Hochschild, A. (1989). *The second shift*. New York: Avon Books.
- Hoffman, L. W., & Hoffman, M. L. (1973). The value of children to parents. In J. T. Fawcett (Ed). *Psychological perspectives on population* (pp. 19–76). New York: Basis Books.
- 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.
- Hogan, D. P., & Kitagawa E. M. (1985). The impact of social status, family structure, and neighborhood on the fertility of black adolescents. *American Journal of Sociology*, 90, 825–855.
- Hogan, D. P., Eggebeen, D. J., & Clogg, C. C. (1993). The structure of intergenerational exchanges in American families. *American Journal of Sociology*, 98, 1428–1458.

- Horowitz, A. (1985). Sons and daughters as care-givers to older parents: Differences in role performance and consequences. *Gerontologist*, 25, 612–617.
- Horwitz, S. M., Klerman, L.V., Kuo, H. S. & Jekel, J. F. (1991). Intergenerational transmission of school-age parenthood. *Family Planning Perspectives*, 23, 168–172, 177.
- Houseknecht, S. K. (1979). Childlessness and marital adjustment. *Journal of Marriage and the Family*, 41, 259–265.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65, 19–51.
- Jacobs, M. J. G. (1995). The wish to become a father: How do men decide in favour of parenthood? In M. C. P. van Dongen, G. A. B. Frinking, & M. J. G. Jacobs (Eds.), *Changing fatherhood: An interdisciplinary perspective* (pp. 67–83). Amsterdam: Thesis Publishers.
- Jansen, M. D., & Liefbroer, A. C. (2006). Couples' attitudes, childbirth and the division of labor. *Journal of Family Issues*, 27, 1487–1511.
- Johnson, D. R., White, L. K., Edwards, J. N., & Booth, A. (1986). Dimensions of marital quality: Towards methodological and conceptual refinement. *Journal of Family Issues*, 7, 31–49.
- Johnson, N. E., & Stokes, C. S. (1976). Family size in successive generations: The effects of birth order, international change in lifestyle, and familial satisfaction. *Demography*, 13, 175–187.
- Kahn, J. R., & Anderson, K. E. (1992). Intergenerational patterns of teenage fertility. *Demography*, 29, 39–57.
- Kiernan, K. E., & Hobcraft, J. (1997). Parental divorce during childhood: Age at first intercourse, partnership and parenthood. *Population Studies*, 51, 41–55.
- Knijn, T. (1997). Keuze voor en beleving van moederschap en vaderschap [The choice for and experience of motherhood and fatherhood]. In M. Niphuis-Nell (Ed.), *Sociale atlas van de vrouw: Deel 4. Veranderingen in de primaire leef sfeer* (pp. 223–245). Rijswijk, the Netherlands: Sociaal en Cultureel Planbureau.
- Knijn, T. (2004). Solidarities between the sexes and the generations: Transformations in Europe. In T. Knijn, & A. Komter (Eds.), *Family solidarity and social solidarity: Substitutes or complements?* (pp. 1833). Northampton, MA: Edward Elgar.
- Knijn, T. C. M., & Liefbroer, A. C. (2006). More kin than kind: Instrumental support in families. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder (Eds.), *Family solidarity in the Netherlands* (pp. 89–105). Amsterdam: Dutch University Press.
- Knijn, T., Ostner, I., & Schmitt, C. (2006). Men and (their) families: Comparative perspectives on men's role and attitudes towards family formation. In J. Bradshaw, & A. Hatland (Eds.), *Social policy, employment and family change in Northern Europe* (pp. 179–197). Cheltenham, UK: Edward Elgar.

- Kohler, H.-P. (2000). Social interactions and fluctuations in birth rates. *Population Studies*, 54, 223–237.
- Kok, J., & Van Bavel, J. (2006). Stemming the tide: Denomination and religiousness in the Dutch fertility transition 1860–1909. In R. Deros, & F. van Poppel (Eds.), *Religion and the decline of fertility in the western world* (pp. 83–105). Dordrecht, the Netherlands: Springer.
- Komter, A. (1989). Hidden power in marriage. *Gender and Society*, 3, 187–216.
- Komter, A. E., & Knijn, T. C. M. (2006). The strength of family ties. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder. *Family solidarity in the Netherlands* (pp. 107–122). Amsterdam: Dutch University Press.
- 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 women and men born in 1964: Substantive interpretations and methodological issues. *Demographic Research*, 17, 211–246.
- Krishnan, V. (1993). Religious homogamy and voluntary childlessness in Canada. *Sociological Perspectives*, 36, 83–93.
- Kurdek, L. A. (1999). The nature and predictors of the trajectory of change in marital quality for husbands and wives over the first 10 years of marriage. *Developmental Psychology*, 35, 1283–1296.
- Larson, J. H., Benson, M. J., Wilson S. M., & Medora, N. (1998). Family of origin influences on marital attitudes and readiness for marriage in late adolescents. *Journal of Family Issues*, 19, 750–768.
- Lesthaeghe, R. (1995). The Second Demographic Transition in Western countries: An interpretation. In K. O. Mason, & A.-M. Jensen (Eds.), *Gender and family change in industrialized countries* (pp. 17–62). Oxford, UK: Clarendon Press.
- Lesthaeghe R. J. (2007). Second Demographic Transition. In G. Ritzer (Ed.), *The Blackwell encyclopedia of sociology* (pp. 4123–4127). Malden, MA: Blackwell.
- Lesthaeghe, R., & Van de Kaa, D. J. (1986). Twee demografische transitities? [Two demographic transitions?]. In D. J. van de Kaa, & R. Lesthaeghe (Eds.), *Bevolking: Groei en krimp* (pp. 9–24). Deventer, the Netherlands: Van Loghum Slaterus.
- Lewis, J. (2001). *The end of marriage? Individualism and intimate relations*. Cheltenham, UK: Edward Elgar.
- Lewis, J., & Knijn, T. (2002). The politics of sex education policy in England and Wales and the Netherlands since the 1980s. *Journal of Social Policy*, 31, 669–694.
- 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.
- Liefbroer, A. (2007). De maakbare levensloop? [The malleable life course?]. In T. van der Lippe, P. A. Dykstra, G. Kraaykamp, & J. Schippers (Eds.), *De maakbaarheid van de levensloop* (pp. 9–20). Assen, the Netherlands: Van Gorcum.

- Liefbroer, A. C. (in press). Changes in family size intentions across young adulthood: A life-course perspective. *European Journal of Population*.
- Liefbroer, A. C., & Kalmijn, M. (1997). *Panel Study of Social Integration in the Netherlands 1987–1995 (PSIN8795): Codebook* (ICS Occasional Papers and Documents Series – ICS Code Books No. 30). Utrecht University, Utrecht, the Netherlands, Interuniversity Center for Social Science Theory and Methodology.
- 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
- Manlove, J. (1997). Early motherhood in an intergenerational perspective: The experiences of a British cohort. *Journal of Marriage and the Family*, 59, 263–297.
- Marcum, J. P. (1986). Explaining Protestant fertility: Belief, commitment, and homogamy. *Sociological Quarterly*, 27, 547–558.
- Mascie-Taylor, C. G. N. (1986). Assortative mating and differential fertility. *Biology and Society*, 3, 167–170.
- McLanahan, S., & Bumpass, L. (1988). Intergenerational consequences of family disruption. *American Journal of Sociology*, 94, 130–152.
- McRae, S. (2003). Constraints and choices in mothers' employment careers: A consideration of Hakim's preference theory. *British Journal of Sociology*, 54, 317–338.
- Michael, R. T., & Tuma, N. B. (1985). Entry into marriage and parenthood by young men and women: The influence of family background. *Demography*, 22, 515–544.
- Miller, W. B., & Pasta, D. J. (1994). The psychology of child timing: A measurement instrument and a model. *Journal of Applied Social Psychology*, 24, 218–250.
- Mills, M. (2007). Individualization and the life course: Towards a theoretical model and empirical evidence, In C. Howard (Ed.), *Contested Individualization* (pp. 61–79). Toronto, Ontario, Canada: Palgrave MacMillan.
- Mills, M., Mencarini, L., Tanturri, M. L., & Begall, K. (2008). Gender equity and fertility intentions in Italy and the Netherlands. *Demographic Research*, 18, 1–26.
- Mitchell, D., & Gray, E. (2007). Declining fertility. Intentions, attitudes and aspirations. *Journal of Sociology*, 43, 23–44.
- Montgomery, M. R., & Casterline, J. B. (1993). The diffusion of fertility control in Taiwan: Evidence from pooled cross-section time-series models. *Population Studies*, 47, 457–479.
- Montgomery, M. R., & Casterline, J. B. (1996). Social learning, social influence and new models of fertility. *Population and Development Review*, 22 (Suppl. Fertility in the United States: New patterns, new theories), 151–175.

- Moore, G. (1990). Structural determinants of men's and women's personal networks. *American Sociological Review*, *55*, 726–735.
- 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.
- Murphy, M., & Knudsen, L. B. (2002). The intergenerational transmission of fertility in contemporary Denmark: The effects of number of siblings (full and half), birth order, and whether male or female. *Population Studies*, *56*, 235–248.
- Murphy, M., & Wang, D. (2001). Family-level continuities in childbearing in low-fertility societies. *European Journal of Population*, *17*, 75–96.
- Myers, S. M. (1997). Marital uncertainty and childbearing. *Social Forces*, *75*, 1271–1289.
- National Research Council. (2001). *Diffusion processes and fertility transitions: Selected Perspectives*. Committee on Populations. J. B. Casterline (Ed.), Division of Behavioral and Social Sciences and Education. Washington, DC,: National Academy Press.
- Nederlandse Gezinsraad. (2001). *Gedeelde keuzen* [Shared choices]. The Hague, the Netherlands: Author.
- Netherlands Fertility and Family Survey 2003 [Data file]. Voorburg/Heerlen, the Netherlands: Statistics Netherlands
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family*, *45*, 141–151.
- Pearce, L. D. (2002). The influence of early life course religious exposure on young adults' dispositions toward childbearing. *Journal for the Scientific Study of Religion*, *41*, 325–340.
- Pearson, K., & Lee, A. (1899). On the inheritance of fertility in mankind. *Philosophical Transactions of the Royal Society of London, Series A*, *192*, 282–330.
- Popenoe, D. (1993). American family decline, 1960–1990: A review and appraisal. *Journal of Marriage and the Family*, *55*, 527–555.
- Poulain, M., Riandey, B., & Firdion, J.-M. (1992). Data from a life history survey and from the Belgian population register: A comparison. *Population: An English Selection*, *4*, 77–96.
- Powers, D. A. (2001). Unobserved family effects on the risk of a first premarital birth. *Social Science Research*, *30*, 1–24.
- Powers, D. A., & Hsueh, J. C.-T. (1997). Sibling models of socioeconomic effects on the timing of first premarital births. *Demography*, *34*, 493–511.
- Raad voor de Volksgezondheid en Zorg. (2008). *Uitstel van ouderschap: Medisch of maatschappelijk probleem?* [Postponement of parenthood: Medical or societal problem?]. The Hague, the Netherlands: Author.

- Rijken, A. J., & Liefbroer, A. C. (2009). The effects of relationship quality on fertility. *European Journal of Population*, 25, 27–44.
- Russel, S. T. (1994). Life course antecedents of premarital conception in Great Britain. *Journal of Marriage and the Family*, 56, 480–492.
- Scanzoni, J., & Szinovacz, M. (1980). *Family decision-making: A developmental sex role model*. Beverly Hills, CA: Sage.
- Schoen, R., Astone, N. M., Kim, Y. J., Nathanson, C. A., & Fields, J. M. (1999). Do fertility intentions affect fertility behaviour? *Journal of Marriage and the Family*, 61, 790–799.
- 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.
- Sevón, E. (2005). Timing motherhood: Experiencing and narrating the choice to become a mothers. *Feminism & Psychology*, 15, 461–482.
- Shorter, E. (1975). *The making of the modern family*. Glasgow, UK: Fontana.
- Sillars, A. L., & Kalbflesch, P. J. (1989). Implicit and explicit decision-making styles in couples. In J. Jaccard (Ed.), *Dyadic decision making* (pp.179–215). New York: Springer-Verlag.
- Sobel, M. E. & Arminger, G. (1992). Modeling household fertility decisions: A nonlinear simultaneous probit model. *Journal of the American Statistical Association*, 87, 38–47.
- Sorenson, A. M. (1989). Husbands' and wives' characteristics and fertility decisions: A diagonal mobility model. *Demography*, 26, 125–135.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of similar dyads. *Journal of Marriage and the Family*, 38, 15–28.
- StataCorp. (2005). *Stata statistical software: Release: 09*. College Station, TX: Stata Corporation.
- Statistics Netherlands. (2005). Toen en nu: Geloof en vruchtbaarheid [Past and present: Religion and fertility]. *Bevolkingstrends*, 53(4), 10.
- Statistics Netherlands. (2007). StatLine databank. Retrieved June 13, 2007, from <http://www.cbs.nl/statline/statweb/>
- Statistics Netherlands. (2008a). StatLine databank. Retrieved April 10, 2008 from <http://statline.cbs.nl/statweb/>
- Statistics Netherlands. (2008b). Helft eerstgeborenen heeft niet-getrouwde ouders [Half of first-borns have unmarried parents]. Webmagazine 28 juli 2008. Retrieved from <http://www.cbs.nl/nl-NL/menu/themas/bevolking/publicaties/artikelen/archief-/2008/2008-2519-wm.htm>
- Statistics Netherlands. (2009). StatLine databank. Retrieved November 15, 2008 from <http://statline.cbs.nl/statweb/>

- Steenhof, L. & De Jong, A. H. (2000). Afstel door uitstel: (kinder)loos alarm? [From postponement to childlessness: False alarm?]. *Maandstatistiek van de bevolking*, 48(1), 9–22.
- Steenhof, L., & Harmsen, C. (2002). Nieuwe samenwoners [New cohabitants]. *Maandstatistiek van de Bevolking*, 50(2), 7–11.
- Steenhof, L., & Liefbroer, A. C. (2008). Intergenerational transmission of age at first birth in the Netherlands for birth cohorts between 1935 and 1984: Evidence from municipal registers. *Population Studies*, 62, 69–84.
- 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
- Thompson, W. S. (1929). Population. *American Journal of Sociology*, 34, 959–975.
- Thomson, E. (1997). Couple childbearing desires, intentions, and births. *Demography*, 34, 343–354.
- 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: NIDI/CBGS Publications No. 37.
- 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: United Nations.
- Thomson, E., McDonald, E., & Bumpass, L. L. (1990). Fertility desires and fertility: Hers, his, and theirs. *Demography*, 27, 579–588.
- Thornton, A. (1977). Children and marital stability. *Journal of Marriage and the Family*, 39, 531–540.
- Thornton, A. (1978). Marital dissolution, remarriage, and childbearing. *Demography*, 15, 361–380.
- Thornton, A. (1980). The influence of first generation fertility and economic status on second generation fertility. *Population and Environment*, 3, 51–72.
- Townsend, N. W. (2002). *The package deal: Marriage, work and fatherhood in men's lives*. Philadelphia: Temple University Press.
- Turchi, B. A. (1975). Microeconomic theories of fertility: A critique. *Social Forces*, 54, 107–125.

- United Nations Economic Commission for Europe. (2005). *Trends in Europe and North America*. Geneva, Switzerland: Author.
- Van de Kaa, D. J. (1987). Europe's Second Demographic Transition. *Population Bulletin*, 42, 1–57.
- Van de Kaa, D. J. (1996). Anchored narratives: The story and findings of half a century of research into the determinants of fertility. *Population Studies*, 50, 389–432.
- Van der Avort, A. J. P. M. (1987). *De gulzige vrijblijvendheid van expliciete relaties* [The greedy non-commitment of explicit relationships]. Doctoral dissertation. Tilburg, the Netherlands: Tilburg University Press.
- Van Gaalen, R. & Van Poppel F. (2007). Kinderen en de veranderingen in de gezinsstructuur in de afgelopen anderhalve eeuw [Children and changes in family structure during the last 150 years]. In T. van der Lippe, P. A. Dykstra, G. Kraaykamp, & J. Schippers (Eds.), *De maakbaarheid van de levensloop* (pp. 21–42). Assen, the Netherlands: Van Gorcum.
- Van Luijn, H. (1996). *Het vrouwelijk dilemma. Besluitvorming van vrouwen met een ambivalente kindwens* [The female dilemma: Decision-making by women with ambivalent child wishes]. Leiden, the Netherlands: DSWO Press.
- 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.
- Von der Lippe, H., & Fuhrer, U. (2004). Where qualitative research meets demography: Interdisciplinary explorations of conceptions of fatherhood in an extremely low fertility context. *Qualitative Research*, 4, 201–226.
- Waite, L. J., & Lillard, L. A. (1991). Children and marital disruption. *American Journal of Sociology*, 96, 1930–1953.
- Westoff, C. F., & Potvin, R. H. (1967). *College women and fertility values*. Princeton, NJ: Princeton University Press.
- Wiesmann, S. M., Boeije, H. R., Van Doorne Huisjes, A., & Den Dulk, L. (2008). 'Not worth mentioning': The implicit and explicit nature of decision-making about the division of (house)work. *Community, Work & Family*, 11, 341–363.
- Wolfinger, N. H. (2000). Beyond the intergenerational transmission of divorce: Do people replicate the patterns of marital instability when they grow up? *Journal of Family Issues*, 21, 1061–1086.
- Wu, Z. (1996). Childbearing in cohabitational relationships. *Journal of Marriage and the Family*, 58, 281–292.
- Xu, X. (1998). Marital quality revisited: A replication and extension of the JWEB model. *Sociological Spectrum*, 18, 367–382.
- Zimmer, B. G., & Fulton, J. (1980). Size of family, life chances, and reproductive behaviour. *Journal of Marriage and the Family*, 42, 657–670.
- Zipp, J. F., & Toth, J. (2002). She said, he said, they said: The impact of spousal presence in survey research. *The Public Opinion Quarterly*, 66, 177–208.

Curriculum Vitae

Arieke Rijken was born in Leuven, Belgium on March 18, 1980. She received her gymnasium diploma at the Visser't Hooft Lyceum in Leiden in 1998. Between 1998 and 2003 she studied Interdisciplinary Social Science at Utrecht University. During this period she spent some months as an exchange student at Lund University, Sweden. In 2003 she obtained her Master of Science degree (cum laude) in Interdisciplinary Social Science. From 2002 to 2004 she worked as a research assistant and junior researcher at the Department of Interdisciplinary Social Science at Utrecht University, contributing to the international research project 'Welfare policy and employment in the context of family change'. In 2004 she started her dissertation research on the influence of family and partner relationships on fertility at the same department, and joined the PhD program of the Interuniversity Center for Social Science Theory and Methodology (ICS). In 2008 she was a visiting scholar at the Stockholm University Demography Unit in Sweden for some months. As of October 2008, she is employed as a postdoctoral researcher at the Netherlands Interdisciplinary Demographic Institute (NIDI) in The Hague.

ICS Dissertation Series

The ICS-series presents dissertations of the Interuniversity Center for Social Science Theory and Methodology. Each of these studies aims at integrating explicit theory formation with state-of-the-art empirical research or at the development of advanced methods for empirical research. The ICS was founded in 1986 as a cooperative effort of the universities of Groningen and Utrecht. Since 1992, the ICS expanded to the University of Nijmegen. Most of the projects are financed by the participating universities or by the Netherlands Organization for Scientific Research (NWO). The international composition of the ICS graduate students is mirrored in the increasing international orientation of the projects and thus of the ICS-series itself.

- 1) C. van Liere, (1990). *Lastige Leerlingen. Een empirisch onderzoek naar sociale oorzaken van probleemgedrag op basisscholen*. Amsterdam: Thesis Publishers.
- 2) Marco H.D. van Leeuwen, (1990). *Bijstand in Amsterdam, ca. 1800 - 1850. Armeezorg als beheersings- en overlevingsstrategie*. ICS dissertation, Utrecht.
- 3) I. Maas, (1990). *Deelname aan podiumkunsten via de podia, de media en actieve beoefening. Substitutie of leereffecten?* Amsterdam: Thesis Publishers.
- 4) M.I. Broese van Groenou, (1991). *Gescheiden netwerken. De relaties met vrienden en verwanten na echtscheiding*. Amsterdam: Thesis Publishers.
- 5) Jan M.M. van den Bos, (1991). *Dutch EC Policy Making. A Model-Guided Approach to Coordination and Negotiation*. Amsterdam: Thesis Publishers.
- 6) Karin Sanders, (1991). *Vrouwelijke pioniers. Vrouwen en mannen met een 'mannelijke' hogere beroepsopleiding aan het begin van hun loopbaan*. Amsterdam: Thesis Publishers.
- 7) Sjerp de Vries, (1991). *Egoism, Altruism, and Social Justice. Theory and Experiments on Cooperation in Social Dilemmas*. Amsterdam: Thesis Publishers.
- 8) Ronald S. Batenburg, (1991). *Automatisering in bedrijf*. Amsterdam: Thesis Publishers.
- 9) Rudi Wielers, (1991). *Selectie en allocatie op de arbeidsmarkt. Een uitwerking voor de informele en geïnstitutionaliseerde kinderopvang*. Amsterdam: Thesis Publishers.
- 10) Gert P. Westert, (1991). *Verschillen in ziekenhuisgebruik*. ICS dissertation, Groningen.
- 11) Hanneke Hermesen, (1992). *Votes and Policy Preferences. Equilibria in Party Systems*. Amsterdam: Thesis Publishers.
- 12) Cora J.M. Maas, (1992). *Probleemleerlingen in het basisonderwijs*. Amsterdam: Thesis Publishers.
- 13) Ed A.W. Boxman, (1992). *Contacten en carrière. Een empirisch-theoretisch onderzoek naar de relatie tussen sociale netwerken en arbeidsmarktposities*. Amsterdam: Thesis Publishers.
- 14) Conny G.J. Taes, (1992). *Kijken naar banen. Een onderzoek naar de inschatting van arbeidsmarktkansen bij schoolverlaters uit het middelbaar beroepsonderwijs*. Amsterdam: Thesis Publishers.
- 15) Peter van Roozendaal, (1992). *Cabinets in Multi-Party Democracies. The Effect of Dominant and Central Parties on Cabinet Composition and Durability*. Amsterdam: Thesis Publishers.
- 16) Marcel van Dam, (1992). *Regio zonder regie. Verschillen in en effectiviteit van gemeentelijk arbeidsmarktbeleid*. Amsterdam: Thesis Publishers.
- 17) Tanja van der Lippe, (1993). *Arbeidsverdeling tussen mannen en vrouwen*. Amsterdam: Thesis Publishers.
- 18) Marc A. Jacobs, (1993). *Software: Kopen of kopiëren? Een sociaal-wetenschappelijk onderzoek onder PC-gebruikers*. Amsterdam: Thesis Publishers.
- 19) Peter van der Meer, (1993). *Verdringing op de Nederlandse arbeidsmarkt. Sector- en sekseverschillen*. Amsterdam: Thesis Publishers.
- 20) Gerbert Kraaykamp, (1993). *Over lezen gesproken. Een studie naar sociale differentiatie in leesgedrag*. Amsterdam: Thesis Publishers.

- 21) Evelien Zeggelink, (1993). *Strangers into Friends. The Evolution of Friendship Networks Using an Individual Oriented Modeling Approach*. Amsterdam: Thesis Publishers.
- 22) Jaco Berveling, (1994). *Het stempel op de besluitvorming. Macht, invloed en besluitvorming op twee Amsterdamse beleidsterreinen*. Amsterdam: Thesis Publishers.
- 23) Wim Bernasco, (1994). *Coupled Careers. The Effects of Spouse's Resources on Success at Work*. Amsterdam: Thesis Publishers.
- 24) Liset van Dijk, (1994). *Choices in Child Care. The Distribution of Child Care Among Mothers, Fathers and Non-Parental Care Providers*. Amsterdam: Thesis Publishers.
- 25) Jos de Haan, (1994). *Research Groups in Dutch Sociology*. Amsterdam: Thesis Publishers.
- 26) K. Boahene, (1995). *Innovation Adoption as a Socio-Economic Process. The Case of the Ghanaian Cocoa Industry*. Amsterdam: Thesis Publishers.
- 27) Paul E.M. Ligthart, (1995). *Solidarity in Economic Transactions. An Experimental Study of Framing Effects in Bargaining and Contracting*. Amsterdam: Thesis Publishers.
- 28) Roger Th. A.J. Leenders, (1995). *Structure and Influence. Statistical Models for the Dynamics of Actor Attributes, Network Structure, and their Interdependence*. Amsterdam: Thesis Publishers.
- 29) Beate Völker, (1995). *Should Auld Acquaintance Be Forgotten...? Institutions of Communism, the Transition to Capitalism and Personal Networks: the Case of East Germany*. Amsterdam: Thesis Publishers.
- 30) A. Cancrinus-Matthijssse, (1995). *Tussen hulpverlening en ondernemerschap. Beroepsuitoefening en taakopvattingen van openbare apothekers in een aantal West-Europese landen*. Amsterdam: Thesis Publishers.
- 31) Nardi Steverink, (1996). *Zo lang mogelijk zelfstandig. Naar een verklaring van verschillen in oriëntatie ten aanzien van opname in een verzorgingstehuis onder fysiek kwetsbare ouderen*. Amsterdam: Thesis Publishers.
- 32) Ellen Lindeman, (1996). *Participatie in vrijwilligerswerk*. Amsterdam: Thesis Publishers.
- 33) Chris Snijders, (1996). *Trust and Commitments*. Amsterdam: Thesis Publishers.
- 34) Koos Postma, (1996). *Changing Prejudice in Hungary. A Study on the Collapse of State Socialism and Its Impact on Prejudice Against Gypsies and Jews*. Amsterdam: Thesis Publishers.
- 35) Joeske T. van Busschbach, (1996). *Uit het oog, uit het hart? Stabiliteit en verandering in persoonlijke relaties*. Amsterdam: Thesis Publishers.
- 36) René Torenvlied, (1996). *Besluiten in uitvoering. Theorieën over beleidsuitvoering modelmatig getoetst op sociale vernieuwing in drie gemeenten*. Amsterdam: Thesis Publishers.
- 37) Andreas Flache, (1996). *The Double Edge of Networks. An Analysis of the Effect of Informal Networks on Cooperation in Social Dilemmas*. Amsterdam: Thesis Publishers.
- 38) Kees van Veen, (1997). *Inside an Internal Labor Market: Formal Rules, Flexibility and Career Lines in a Dutch Manufacturing Company*. Amsterdam: Thesis Publishers.
- 39) Lucienne van Eijk, (1997). *Activity and Well-being in the Elderly*. Amsterdam: Thesis Publishers.
- 40) Róbert Gál, (1997). *Unreliability. Contract Discipline and Contract Governance under Economic Transition*. Amsterdam: Thesis Publishers.
- 41) Anne-Geerte van de Goor, (1997). *Effects of Regulation on Disability Duration*. ICS dissertation, Utrecht.
- 42) Boris Blumberg, (1997). *Das Management von Technologiekooperationen. Partnersuche und Verhandlungen mit dem Partner aus Empirisch-Theoretischer Perspektive*. ICS dissertation, Utrecht.
- 43) Marijke von Bergh, (1997). *Loopbanen van oudere werknemers*. Amsterdam: Thesis Publishers.
- 44) Anna Petra Nieboer, (1997). *Life-Events and Well-Being: A Prospective Study on Changes in Well-Being of Elderly People Due to a Serious Illness Event or Death of the Spouse*. Amsterdam: Thesis Publishers.
- 45) Jacques Niehof, (1997). *Resources and Social Reproduction: The Effects of Cultural and Material Resources on Educational and Occupational Careers in Industrial Nations at the End of the Twentieth Century*. ICS dissertation, Nijmegen.
- 46) Ariana Need, (1997). *The Kindred Vote. Individual and Family Effects of Social Class and Religion on Electoral Change in the Netherlands, 1956-1994*. ICS dissertation, Nijmegen.
- 47) Jim Allen, (1997). *Sector Composition and the Effect of Education on Wages: An International Comparison*. Amsterdam: Thesis Publishers.

- 48) Jack B.F. Hutten, (1998). *Workload and Provision of Care in General Practice. An Empirical Study of the Relation Between Workload of Dutch General Practitioners and the Content and Quality of their Care.* ICS dissertation, Utrecht.
- 49) Per B. Kropp, (1998). *Berufserfolg im Transformationsprozeß. Eine theoretisch-empirische Studie über die Gewinner und Verlierer der Wende in Ostdeutschland.* ICS dissertation, Utrecht.
- 50) Maarten H.J. Wolbers, (1998). *Diploma-inflatie en verdringing op de arbeidsmarkt. Een studie naar ontwikkelingen in de opbrengsten van diploma's in Nederland.* ICS dissertation, Nijmegen.
- 51) Wilma Smeenk, (1998). *Opportunity and Marriage. The Impact of Individual Resources and Marriage Market Structure on First Marriage Timing and Partner Choice in the Netherlands.* ICS dissertation, Nijmegen.
- 52) Marinus Spreen, (1999). *Sampling Personal Network Structures: Statistical Inference in Ego-Graphs.* ICS dissertation, Groningen.
- 53) Vincent Buskens, (1999). *Social Networks and Trust.* ICS dissertation, Utrecht.
- 54) Susanne Rijken, (1999). *Educational Expansion and Status Attainment. A Cross-National and Over-Time Comparison.* ICS dissertation, Utrecht.
- 55) Mérove Gijsberts, (1999). *The Legitimation of Inequality in State-Socialist and Market Societies, 1987-1996.* ICS dissertation, Utrecht.
- 56) Gerhard G. Van de Bunt, (1999). *Friends by Choice. An Actor-Oriented Statistical Network Model for Friendship Networks Through Time.* ICS dissertation, Groningen.
- 57) Robert Thomson, (1999). *The Party Mandate: Election Pledges and Government Actions in the Netherlands, 1986-1998.* Amsterdam: Thela Thesis.
- 58) Corine Baarda, (1999). *Politieke besluiten en boeren beslissingen. Het draagvlak van het mestbeleid tot 2000.* ICS dissertation, Groningen.
- 59) Rafael Wittek, (1999). *Interdependence and Informal Control in Organizations.* ICS dissertation, Groningen.
- 60) Diane Payne, (1999). *Policy Making in the European Union: An Analysis of the Impact of the Reform of the Structural Funds in Ireland.* ICS dissertation, Groningen.
- 61) René Veenstra, (1999). *Leerlingen - Klassen - Scholen. Prestaties en vorderingen van leerlingen in het voortgezet onderwijs.* Amsterdam, Thela Thesis.
- 62) Marjolein Achterkamp, (1999). *Influence Strategies in Collective Decision Making. A Comparison of Two Models.* ICS dissertation, Groningen.
- 63) Peter Mühlau, (2000). *The Governance of the Employment Relation. A Relational Signaling Perspective.* ICS dissertation, Groningen.
- 64) Agnes Akkerman, (2000). *Verdeelde vakbeweging en stakingen. Concurrentie om leden.* ICS dissertation, Groningen.
- 65) Sandra van Thiel, (2000). *Quangocratization: Trends, Causes and Consequences.* ICS dissertation, Utrecht.
- 66) Rudi Turksema, (2000). *Supply of Day Care.* ICS dissertation, Utrecht.
- 67) Sylvia E. Korupp (2000). *Mothers and the Process of Social Stratification.* ICS dissertation, Utrecht.
- 68) Bernard A. Nijstad (2000). *How the Group Affects the Mind: Effects of Communication in Idea Generating Groups.* ICS dissertation, Utrecht.
- 69) Inge F. de Wolf (2000). *Opleidingspecialisatie en arbeidsmarktsucces van sociale wetenschappers.* ICS dissertation, Utrecht.
- 70) Jan Kratzer (2001). *Communication and Performance: An Empirical Study in Innovation Teams.* ICS-dissertation, Groningen.
- 71) Madelon Kroneman (2001). *Healthcare Systems and Hospital Bed Use.* ICS/NIVEL-dissertation, Utrecht.
- 72) Herman van de Werfhorst (2001). *Field of Study and Social Inequality. Four Types of Educational Resources in the Process of Stratification in the Netherlands.* ICS-dissertation, Nijmegen.
- 73) Tamás Bartus (2001). *Social Capital and Earnings Inequalities. The Role of Informal Job Search in Hungary.* ICS-dissertation Groningen.
- 74) Hester Moerbeek (2001). *Friends and Foes in the Occupational Career. The Influence of Sweet and Sour Social Capital on the Labour Market.* ICS-dissertation, Nijmegen.

- 75) Marcel van Assen (2001). *Essays on Actor Perspectives in Exchange Networks and Social Dilemmas*. ICS-dissertation, Groningen.
- 76) Inge Sieben (2001). *Sibling Similarities and Social Stratification. The Impact of Family Background across Countries and Cohorts*. ICS-dissertation, Nijmegen.
- 77) Alinda van Bruggen (2001). *Individual Production of Social Well-Being. An Exploratory Study*. ICS-dissertation, Groningen.
- 78) Marcel Coenders (2001). *Nationalistic Attitudes and Ethnic Exclusionism in a Comparative Perspective: An Empirical Study of Attitudes Toward the Country and Ethnic Immigrants in 22 Countries*. ICS-dissertation, Nijmegen.
- 79) Marcel Lubbers (2001). *Exclusionistic Electorates. Extreme Right-Wing Voting in Western Europe*, ICS-dissertation, Nijmegen.
- 80) Uwe Matzat (2001). *Social Networks and Cooperation in Electronic Communities. A theoretical-empirical Analysis of Academic Communication and Internet Discussion Groups*, ICS-dissertation, Groningen.
- 81) Jacques P.G. Janssen (2002). *Do Opposites Attract Divorce? Dimensions of Mixed Marriage and the Risk of Divorce in the Netherlands*, ICS-dissertation, Nijmegen.
- 82) Miranda Jansen (2002). *Waardenoriëntaties en partnerrelaties. Een panelstudie naar wederzijdse invloeden*, ICS-dissertation, Utrecht.
- 83) Anne Rigt Poortman (2002). *Socioeconomic Causes and Consequences of Divorce*. ICS-dissertation, Utrecht.
- 84) Alexander Gattig (2002). *Intertemporal Decision Making*, ICS-dissertation, Groningen.
- 85) Gerrit Rooks (2002). *Contract en Conflict: Strategisch Management van Inkooptransacties*, ICS-dissertation, Utrecht.
- 86) Károly Takács (2002). *Social Networks and Intergroup Conflict*. ICS-dissertation, Groningen.
- 87) Thomas Gautschi (2002). *Trust and Exchange, Effects of Temporal Embeddedness and Network Embeddedness on Providing and Dividing a Surplus*. ICS-dissertation, Utrecht.
- 88) Hilde Bras (2002). *Zeeuwse meiden. Dienen in de levensloop van vrouwen, ca. 1850 – 1950*. Aksant Academic Publishers, Amsterdam.
- 89) Merijn Rengers (2002). *Economic Lives of Artists. Studies into Careers and the Labour Market in the Cultural Sector*, ICS-dissertation, Utrecht.
- 90) Annelies Kassenberg (2002). *Wat scholieren bindt. Sociale gemeenschap in scholen*, ICS-dissertation, Groningen
- 91) Marc Verboord (2003). *Moet de meester dalen of de leerling klimmen? De invloed van literatuuronderwijs en ouders op het lezen van boeken tussen 1975 en 2000*. ICS-dissertation, Utrecht.
- 92) Marcel van Egmond (2003). *Rain Falls on All of Us (but Some Manage to Get More Wet than Others): Political Context and Electoral Participation*. ICS-dissertation, Nijmegen.
- 93) Justine Horgan (2003). *High Performance Human Resource Management in Ireland and the Netherlands: Adoption and Effectiveness*. ICS-dissertation, Groningen.
- 94) Corine Hoeben (2003). *LETS' Be a Community. Community in Local Exchange Trading Systems*. ICS-dissertation, Groningen.
- 95) Christian Steglich (2003). *The Framing of Decision Situations. Automatic Goal Selection and Rational Goal Pursuit*. ICS-dissertation, Groningen.
- 96) Johan van Wilsem (2003). *Crime and Context. The Impact of Individual, Neighborhood, City and Country Characteristics on Victimization*. ICS-dissertation, Nijmegen.
- 97) Christiaan Monden (2003). *Education, Inequality and Health. The Impact of Partners and Life Course*. ICS-dissertation, Nijmegen.
- 98) Evelyn Hello (2003). *Educational Attainment and Ethnic Attitudes. How to Explain their Relationship*. ICS-dissertation, Nijmegen.
- 99) Marnix Croes en Peter Tammes (2004). *Gif laten wij niet voortbestaan. Een onderzoek naar de overlevingskansen van joden in de Nederlandse gemeenten, 1940-1945*. Aksant Academic Publishers, Amsterdam
- 100) Ineke Nagel (2004). *Cultuurdeelname in de levensloop*. ICS- dissertation, Utrecht.

- 101) Marieke van der Wal (2004). *Competencies to Participate in Life. Measurement and the Impact of School*. ICS-dissertation, Groningen.
- 102) Vivian Meertens (2004). *Depressive Symptoms in the General Population: A Multifactorial Social Approach*. ICS -dissertation, Nijmegen.
- 103) Hanneke Schuurmans (2004). *Promoting Well-Being in Frail Elderly People. Theory and Intervention*. ICS-dissertation, Groningen.
- 104) Javier Arregui (2004). *Negotiation in Legislative Decision-Making in the European Union*. ICS-dissertation, Groningen.
- 105) Tamar Fischer (2004). *Parental Divorce, Conflict and Resources. The Effects on Children's Behaviour Problems, Socioeconomic Attainment, and Transitions in the Demographic Career*. ICS-dissertation, Nijmegen.
- 106) René Bekkers (2004). *Giving and Volunteering in the Netherlands: Sociological and Psychological Perspectives*. ICS-dissertation, Utrecht.
- 107) Renée van der Hulst (2004). *Gender Differences in Workplace Authority: An Empirical Study on Social Networks*. ICS-dissertation, Groningen.
- 108) Rita Smaniotto (2004). *'You Scratch My Back and I Scratch Yours' Versus 'Love Thy Neighbour'. Two Proximate Mechanisms of Reciprocal Altruism*. ICS-dissertation, Groningen.
- 109) Maurice Gesthuizen (2004). *The Life-Course of the Low-Educated in the Netherlands: Social and Economic Risks*. ICS-dissertation, Nijmegen.
- 110) Carljine Philips (2005). *Vakantiegemeenschappen. Kwalitatief en kwantitatief onderzoek naar gelegenheid en refreshergemeenschap tijdens de vakantie*. ICS-dissertation, Groningen.
- 111) Esther de Ruijter (2005). *Household Outsourcing*. ICS-dissertation, Utrecht.
- 112) Frank van Tubergen (2005). *The Integration of Immigrants in Cross-National Perspective: Origin, Destination, and Community Effects*. ICS-dissertation, Utrecht.
- 113) Ferry Koster (2005). *For the Time Being. Accounting for Inconclusive Findings Concerning the Effects of Temporary Employment Relationships on Solidary Behavior of Employees*. ICS-dissertation, Groningen.
- 114) Carolien Klein Haarhuis (2005). *Promoting Anti-Corruption Reforms. Evaluating the Implementation of a World Bank Anti-Corruption Program in Seven African Countries (1999-2001)*. ICS-dissertation, Utrecht.
- 115) Martin van der Gaag (2005). *Measurement of Individual Social Capital*. ICS-dissertation, Groningen.
- 116) Johan Hansen (2005). *Shaping Careers of Men and Women in Organizational Contexts*. ICS-dissertation, Utrecht.
- 117) Davide Barrera (2005). *Trust in Embedded Settings*. ICS-dissertation, Utrecht.
- 118) Mattijs Lambooy (2005). *Promoting Cooperation. Studies into the Effects of Long-Term and Short-Term Rewards on Cooperation of Employees*. ICS-dissertation, Utrecht.
- 119) Lotte Vermeij (2006). *What's Cooking? Cultural Boundaries among Dutch Teenagers of Different Ethnic Origins in the Context of School*. ICS-dissertation, Utrecht.
- 120) Mathilde Strating (2006). *Facing the Challenge of Rheumatoid Arthritis. A 13-year Prospective Study among Patients and Cross-Sectional Study among Their Partners*. ICS-dissertation, Groningen.
- 121) Jannes de Vries (2006). *Measurement Error in Family Background Variables: The Bias in the Intergenerational Transmission of Status, Cultural Consumption, Party Preference, and Religiosity*. ICS-dissertation, Nijmegen.
- 122) Stefan Thau (2006). *Workplace Deviance: Four Studies on Employee Motives and Self-Regulation*. ICS-dissertation, Groningen.
- 123) Mirjam Plantinga (2006). *Employee Motivation and Employee Performance in Child Care. The effects of the Introduction of Market Forces on Employees in the Dutch Child-Care Sector*. ICS-dissertation, Groningen.
- 124) Helga de Valk (2006). *Pathways into Adulthood. A Comparative Study on Family Life Transitions among Migrant and Dutch Youth*. ICS-dissertation, Utrecht.
- 125) Henrike Elzen (2006). *Self-Management for Chronically Ill Older People*. ICS-Dissertation, Groningen.
- 126) Ayse Güveli (2007). *New Social Classes within the Service Class in the Netherlands and Britain. Adjusting the EGP Class Schema for the Technocrats and the Social and Cultural Specialists*. ICS-dissertation, Nijmegen.

- 127) Willem-Jan Verhoeven (2007). *Income Attainment in Post-Communist Societies*. ICS-dissertation, Utrecht.
- 128) Marieke Voorpostel (2007). *Sibling support: The Exchange of Help among Brothers and Sisters in the Netherlands*. ICS-dissertation, Utrecht.
- 129) Jacob Dijkstra (2007). *The Effects of Externalities on Partner Choice and Payoffs in Exchange Networks*. ICS-dissertation, Groningen.
- 130) Patricia van Echtelt (2007). *Time-Greedy Employment Relationships: Four Studies on the Time Claims of Post-Fordist Work*. ICS-dissertation, Groningen.
- 131) Sonja Vogt (2007). *Heterogeneity in Social Dilemmas: The Case of Social Support*. ICS-dissertation, Utrecht.
- 132) Michael Schweinberger (2007). *Statistical Methods for Studying the Evolution of Networks and Behavior*. ICS-dissertation, Groningen.
- 133) István Back (2007). *Commitment and Evolution: Connecting Emotion and Reason in Long-term Relationships*. ICS-dissertation, Groningen.
- 134) Ruben van Gaalen (2007). *Solidarity and Ambivalence in Parent-Child Relationships*. ICS-dissertation, Utrecht.
- 135) Jan Reitsma (2007). *Religiosity and Solidarity – Dimensions and Relationships Disentangled and Tested*. ICS-dissertation, Nijmegen.
- 136) Jan Kornelis Dijkstra (2007). *Status and Affection among (Pre)Adolescents and Their Relation with Antisocial and Prosocial Behavior*. ICS-dissertation, Groningen.
- 137) Wouter van Gils (2007). *Full-time Working Couples in the Netherlands. Causes and Consequences*. ICS-dissertation, Nijmegen.
- 138) Djamila Schans (2007). *Ethnic Diversity in Intergenerational Solidarity*. ICS-dissertation, Utrecht.
- 139) Ruud van der Meulen (2007). *Brug over Woelig Water: Lidmaatschap van Sportverenigingen, Vriendschappen, Kennissenkringen en Veralgemeend Vertrouwen*. ICS-dissertation, Nijmegen.
- 140) Andrea Knecht (2008). *Friendship Selection and Friends' Influence. Dynamics of Networks and Actor Attributes in Early Adolescence*. ICS-dissertation, Utrecht.
- 141) Ingrid Doorten (2008). *The Division of Unpaid Work in the Household: A Stubborn Pattern?* ICS-dissertation, Utrecht.
- 142) Stijn Ruiter (2008). *Association in Context and Association as Context: Causes and Consequences of Voluntary Association Involvement*. ICS-dissertation, Nijmegen.
- 143) Janneke Joly (2008). *People on Our Minds: When Humanized Contexts Activate Social Norms*. ICS-dissertation, Groningen.
- 144) Margreet Frieling (2008). *'Joint production' als motor voor actief burgerschap in de buurt*. ICS-dissertation, Groningen.
- 145) Ellen Verbakel (2008). *The Partner as Resource or Restriction? Labour Market Careers of Husbands and Wives and the Consequences for Inequality Between Couples*. ICS-dissertation, Nijmegen.
- 146) Gijs van Houten (2008). *Beleidsuitvoering in gelaagde stelsels. De doorwerking van aanbevelingen van de Stichting van de Arbeid in het CAO-overleg*. ICS-dissertation, Utrecht.
- 147) Eva Jaspers (2008). *Intolerance over Time. Macro and Micro Level Questions on Attitudes Towards Euthanasia, Homosexuality and Ethnic Minorities*. ICS-dissertation, Nijmegen.
- 148) Gijs Weijters (2008). *Youth Delinquency in Dutch Cities and Schools: A Multilevel Approach*. ICS-dissertation, Nijmegen.
- 149) Jessica Pass (2009). *The Self in Social Rejection*. ICS-dissertation, Groningen.
- 150) Gerald Mollenhorst (2009). *Networks in Contexts. How Meeting Opportunities Affect Personal Relationships*. ICS-dissertation, Utrecht.
- 151) Tom van der Meer (2009). *States of Freely Associating Citizens: Comparative Studies into the Impact of State Institutions on Social, Civic and Political Participation*. ICS-dissertation, Nijmegen.
- 152) Manuela Vieth (2009). *Commitments and Reciprocity in Trust Situations. Experimental Studies on Obligation, Indignation, and Self-Consistency*. ICS-dissertation, Utrecht.
- 153) Rense Corten (2009). *Co-evolution of Social Networks and Behavior in Social Dilemmas: Theoretical and Empirical Perspectives*. ICS-dissertation, Utrecht.
- 154) Arieke J. Rijken (2009). *Happy Families, High fertility? Childbearing Choices in the Context of Family and Partner Relationships*. ICS-dissertation, Utrecht.

